



PHOTO OF WILD IRIS BLOOM BY SYDNEY MITCHELL, LAROCHE + ASSOCIATES

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coastal **VOLUME 2**
Management Plan
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Juneau Wetlands Management Plan

Prepared by: City and Borough of Juneau
Community Development Department
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Reprint with Foreword by:



LaRoche+Associates

Juneau Coastal Management Plan Volume II:
Juneau Wetlands Management Plan

Prepared by: City & Borough of Juneau
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Revised February 2008



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FOREWORD

Changes to the Alaska Coastal Management Program (ACMP) require that all Coastal Management Plans, including Special Area Management Plans be submitted for re-approval by the Commissioner of Natural Resources. This foreword introduces the previously approved Juneau Wetlands Management Plan, a component of the Juneau Coastal Management Plan, and demonstrates how the plan addresses the new ACMP requirements. Revised sections are indicated in the footer. Other modifications to the previously approved document are not substantive and are limited to those necessary to present this document in digital format.

The Juneau Wetlands Management Plan was prepared as a Special Area Management Plan. It was adopted by the former Coastal Policy Council as an amendment to the Juneau Coastal Management Plan and went into effect in November 1993. It was revised to incorporate changes that were required during the approval process and reprinted in 1997. The 1997 revision did not alter the assumptions or methodology that led to the original wetland classifications, nor modify the enforceable policies that were approved by the former Alaska Coastal Policy Council. As such the Juneau Wetlands Management Plan and its enforceable policies are “grand-fathered” with respect to certain elements of the new laws (see “Adequacy” pg. x). However, under the new ACMP laws, in order to have policies that address freshwater wetlands (palustrine), the plan must designate these wetlands as “important habitat.”

11 AAC 114.250. Subject uses, activities, and designations. *(h) A district shall consider and may designate portions of habitat areas listed in 11 AAC 112.300(a)(1) – (8) and other habitats in the coastal area as important habitat if*

- (1) the use of those designated portions have a direct and significant impact on coastal water; and*
- (2) the designated portions are shown by written scientific evidence to be biologically and significantly productive. (Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172; am 6/25/2005)*

Pursuant to the regulations for designating important habitat, the use of the designated wetland must be shown to have a direct and significant impact on the saltwater environment; and the designated wetlands must be shown by written scientific evidence to be biologically and significantly productive. Once the designations are justified enforceable policies may be written and applied within the designated areas as long as they comply with other requirements for enforceable policies. In this case the objective is to retain the classification system and enforceable policies approved by the former Coastal Policy Council. This foreword provides the necessary documentation to designate the wetlands in the Juneau Wetlands Management Plan as important habitat.

11 AAC 112.300. Habitats. *(b) The following standards apply to the management of the habitats identified in (a) of this section: (9) important habitat (A) designated under 11 AAC 114.250(h) must be managed for the special productivity of the habitat in accordance with district enforceable policies adopted under 11 AAC 114.270(g); (Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172).*

Specifically, this foreword describes the designations and addresses: 1) background scientific basis for the wetlands classification system, 2) direct and significant impact on coastal water and productivity, and 3) adequacy.

IMPORTANT HABITAT DESIGNATIONS

The Juneau Wetlands Management Plan is located entirely within the City and Borough of Juneau coastal management boundary. Specific wetland sites, or units, are included within a study area which is about 15 square miles and includes the Mendenhall Valley, Auke Bay, Lemon Creek, and North Douglas. The location of each wetland unit was determined by the U.S. Army Corps of Engineers. The Juneau Wetlands Management Plan includes maps of the wetlands units within the Juneau study area and a list of each wetland unit and its classification. All of the wetland units within the study area are designated important habitat for purposes of coastal management.

BACKGROUND

In 1985, the City and Borough of Juneau initiated the planning process by forming a Wetlands Interagency Advisory Committee. The committee selected the “Adamus Wetlands Evaluation Technique (WET)” for the environmental assessment. Paul Adamus was retained to evaluate each of the study area wetlands that had been previously identified and mapped by the Corps of Engineers. The field work for the environmental evaluation lasted one year, and the study team included researchers from Syracuse University, the State University of New York at Syracuse, and the University of Minnesota. A number of Juneau habitat biologists were employed to conduct the field work, including bird surveys and fish counts. Professionals associated with the National Marine Fisheries Service Auke Bay Laboratory, and a variety of State and federal agencies and independent experts, made voluntary contributions. The result was a scientifically based evaluation of functions that eventually led to the classification system and wetland management policies. Scientific documentation for the classification system can be found in the following studies that were produced specifically for the Juneau Wetlands Management Plan.

Adamus Resource Assessment, Inc., 1987 “Juneau Wetlands Functions and Values,” CBJ (*see Appendix B to this Volume*).

Adamus Resource Assessment, Inc., 1987 “Juneau Wetlands Map Appendix,” CBJ (*see Appendix B to this Volume*).

Adamus Resource Assessment, Inc., 1987, “Juneau Wetlands: Rapid Assessment Method for Southeast Alaska,” CBJ.

IMPACT ON COASTAL WATER AND PRODUCTIVITY

Wetlands are intermediate between the terrestrial and aquatic environments (Mitsch and Gosselink, 1993) and serve as critical points for the transport and transformation of essential nutrients from the terrestrial to the aquatic realm. In areas of steep terrain and high precipitation

such as southeast Alaska, the potential for movement and transformation of elements in the wetlands to the aquatic environment is high. Wetlands are a large component of the landscape in southeast Alaska, comprising more than 29% of the land area (National Wetland Inventory Database).

The wetlands in southeast Alaska are composed of both deep organic soil peatlands and mineral soil wetlands. Peatlands are often difficult to discern from mineral soil wetlands on the landscape (D'Amore and Lynn, 2002). Therefore, the mosaic of mineral soil wetland and peatland are often referred to in a management context collectively as "wetland." These soils contain nearly three times the amount of carbon stored above ground in vegetation (Eswaran et al. 1993), and peatlands contain the majority of this terrestrial carbon stock (Gorham, 1991).

Wetlands provide substantial dissolved organic matter (DOM) to surface waters and ultimately the ocean. In many northern ecosystems, peatlands are a major source of DOM to surface waters as evidenced by the link between percentage peat cover and riverine DOM fluxes (Dillon and Molot, 1997; Gorham et al., 1998; Aitkenhead et al, 1999).

At the landscape scale, the strongest correlate of DOM concentrations in aquatic ecosystems is the percentage of wetlands in the watershed. Ongoing studies are demonstrating the response of stream and estuarine foodwebs to alterations of these freshwater wetlands (Bridgham et al Abstract, 2005). On a global scale, northern peatlands account for nearly one third of the total soil carbon pool (Gorham, 1991). The export of this carbon to surface waters is largely controlled by hydrology and climate of these systems (Moore, 1998) and thus may be altered by changes to these variables by development or loss of wetland hydrologic connections.

The few studies of stream nutrient budgets in the region have not considered the wetland contribution of DOM (Stednick, 1981; Sugai and Burrell, 1984), but recent research has shown that wetlands-dominated watersheds contribute substantially more carbon to streams than non-wetland watersheds (AGU Abstracts, 2005). Organic rich streams are abundant in southeast Alaska and this flow can be traced to the terrestrial environment. Clearly, the wetlands designated in the Juneau Wetlands Management Plan have a direct and significant beneficial impact on coastal water. On the basis of carbon-cycling alone, scientific studies have shown that these wetlands are biologically and significantly productive. (Aiken, 2005; Aitkenhead, Hope and Billet, 1999);

It must be noted that the converse is also true. Use of wetlands equates to filling of wetlands. Depending on the extent, filling wetlands impairs or eliminates the functions. In the case of nutrient export in Southeast Alaska, impaired function means a negative impact on coastal water, specifically, a loss of nutrients. Thus the use of the wetlands designated as important habitat in the Juneau Wetlands Management Plan has a direct and significant impact on coastal water.

In addition to these recent scientific studies, the Adamus studies (1987) scientifically document fourteen discreet functions of each individual wetland in the Juneau Wetlands Management Study Area. The Adamus studies document twelve habitat-related wetland functions (including nutrient export), that would be impaired or lost by use (fill), that have a direct and significant impact on coastal water, and that are biologically and significantly productive. Hence the criterion for important habitat designation has been met. The remaining two functions, "Recreation Actual" and "Recreation Potential" could be used to support a recreation designation, although that is not considered necessary to achieve the objectives of the Wetlands Management Plan, nor is it proposed. These functions are:

1. **Recharge:** Downward flow of water to ground water aquifers.
2. **Discharge:** Upward flow of ground water, often into streams.
3. **Surface Hydrologic Control:** Moderation of stream water flow fluctuations caused by surface runoff, important for restricting the velocity of runoff, protects streams against flash flooding.
4. **Sediment/Toxicant Retention:** Natural filtering effect for filtering out toxicants and dirt by allowing particulate matter to settle out. Can be good if clear water is passed downstream. Can be harmful if the sediments collect on site and the site has salmon eggs or other sensitive aquatic specimens.
5. **Nutrient Export:** Transports nitrogen and phosphorous downstream or to estuaries. In the "Lower 48" states this can be harmful because too much nitrogen/phosphorous creates algae blooms which choke off oxygen. In Juneau, nutrient export is helpful because streams do not have a lot of nutrients.
6. **Riparian Support:** Foliage along a stream or lake shore. Streamside vegetation protects salmon eggs from too much sun in shallow waters. The foliage also provides nutrients when it falls into the water. Overhanging vegetation provides protection for salmon smolts.
7. **Erosion Sensitivity:** Wetlands with steep slopes are prone to rapid erosion.
8. **Salmonid Habitat:** Habitat for salmon and related species. There are two major habitat types: spawning for adults, and overwintering for juveniles. Of the two habitats, overwintering is often the most critical one determining species abundance.
9. **Disturbance Sensitive Wildlife:** Wildlife which cannot tolerate urbanization.
10. **Ecological Diversity:** The degree to which individual wetlands support a wide variety of plants or animals or has some unusual habitats. A significant component is range of bird species present.
11. **Replacement Cost:** Cost in terms of time needed to replicate a wetland environment. For example, a tidal wetland can be regenerated, but peat takes thousands of years.
12. **Downslope Beneficiary or Passive Economic Service:** A wetland is more important if it prevents flooding of downstream buildings and property.
13. **Recreation Actual:** Actual use as determined by results of public surveys.
14. **Recreation Potential:** Wetlands closest to roads were given a higher potential than isolated wetlands.

ADEQUACY

11 AAC 114.270. District enforceable policies. (i) Notwithstanding any contrary provision of (e)(3) of this section, enforceable policies contained in a district plan approved by the former Coastal Policy Council under former 6 AAC 85.195 – 6 AAC 85.225 and in effect on July 1, 2004, satisfy the requirements of AS 46.40.070(a)(2)(C)(i) and (iii). However, those enforceable policies must be revised as appropriate to meet all other requirements of AS 46.40.030 and 46.40.070. (Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172)

Under state statutes, the enforceable policies of the district coastal management plan must not address a matter regulated or authorized by state or federal law unless the enforceable policies relate specifically to a matter of local concern. A matter of local concern is a specific coastal use or resource within a defined portion of the district's coastal zone that is

- (1) demonstrated as sensitive to development;
- (2) not adequately addressed by state or federal law; and
- (3) of unique concern to the coastal resource district as demonstrated by local usage or scientific evidence.

Since there are state and federal laws that may regulate or authorize the matters addressed in the management plan's enforceable policies, the local concern test is applied. Enforceable policies contained in a Special Area Management Plan in effect on July 1, 2004 satisfy the requirements of (1) and (3) above (11 AAC 114.270(i)). In regard to the second prong of the three-part test, the plan's enforceable policies relate to important wetland habitat.

State Laws

The statewide wetlands standard is limited to avoiding, minimizing or mitigating significant adverse impacts to water flow and natural drainage patterns of saltwater (estuarine). The statewide standard fails to address the functions and values of freshwater (palustrine) wetlands in any way let alone in the rigorous fashion in which the Juneau wetlands were classified. For these management goals, the Wetlands Management Plan provides specific measures for implementing

11 AAC 114.270. District enforceable policies. (g) For an area designated by a district under 11 AAC 114.250(b) - (i), for a special area management plan developed under 11 AAC 114.400, a district may adopt enforceable policies that will be used to determine whether a specific land or water use or activity will be allowed. (Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172)

the avoid, minimize or mitigate sequence. The minimization and mitigation measures in the plan must specifically address the highly rated functional values of the particular wetland unit being impacted. The plan also addresses management goals not addressed by the statewide standard. This increased specificity is needed to determine whether a specific land or water use or activity will be allowed within the special management areas; to protect significant natural resources (the wetland resource); and to provide for coastal-development economic growth and improved predictability in governmental decision making (as permitted by 11 AAC 114.270(g) and 11 AAC 114.400).

11 AAC 114.400. Special area management plans. *A district may develop a special area management plan to manage a specific resource or activity within the district. Examples of a special area management plan include a harbor management plan, an ocean resource management plan, a public use management plan, a recreation management plan, a watershed management plan, and a wetlands management plan. A special area management plan may provide for increased specificity in protecting significant natural resources, coastal-dependent economic growth, improved protection of life and property in hazardous areas, and improved predictability in governmental decision making. Development and commissioner approval of a special area management plan for inclusion in the program must follow the procedures for approval of a district plan or significant amendment as described in 11 AAC 114.300 - 11 AAC 114.360. (Eff. 7/1/2004, Register 170)*

Federal Laws

Federal statutes and regulations provide authority to the COE to regulate the discharge of dredged or fill material into wetlands that is broad in scope and general in application. It is a binary system. There is no rating system nor ability to discriminate wetlands for management or mitigation. The COE has acknowledged the inadequacy of its laws by entering into a MOA with the CBJ for management of district wetland resources.

Specifically, the Corps of Engineers reviews applications for permits to discharge dredged and fill material in wetlands in accordance with federal regulations found in 40 CFR, Part 230, commonly known as the "404(b)(1) guidelines." The Corps asks the Environmental Protection Agency (EPA) and other federal resource agencies to review the permit application to determine if the proposed use is "water dependent," and whether there are practicable alternatives to the proposed use if it is not water dependent.

Since all of the wetlands evaluated in the Juneau wetlands plan are interior freshwater wetlands (palustrine), very few permit applicants propose water dependent uses for these wetlands. The determination of the availability of practicable alternatives to wetland sites becomes crucial to the decision whether to issue a permit.

In addition to the practicable alternatives requirement, the Corps of Engineers' permitting process requires a broad-based public interest review that considers and balances a wide range of factors. The Corps of Engineers' regulations state:

All factors which may be relevant to the proposal must be considered, including the cumulative effects thereof: Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

This statement indicates that any management plan that identifies in advance how wetlands should be managed, must also be based on this comprehensive general balancing process. This comprehensive approach is achieved in the Juneau Wetlands Management Plan by its three

components: (1) comparison of the environmental values of wetlands, (2) analysis of practicable alternatives for each type of land use (zoning classification), and (3) consideration of public preferences for management of each wetland unit.

To classify the wetland units, each of the three components listed above was separately evaluated. Each wetland unit was assigned a "ranking" for each of the three components. The City and Borough of Juneau then created and used a new quantitative methodology to consolidate the data from the three components to generate an overall classification for each wetland (Category A, B, C, D or EP).

While the Juneau Wetland Management Plan was designed in accordance with Corps of Engineers regulations, it does not duplicate but "flows from" and supplements the Corp permitting process. Unlike the Corps of Engineers regulations, the Juneau Wetlands Management Plan provides a scientifically based classification system that enable managers to discriminate wetlands units for management and mitigation. Furthermore, in a letter to the State of Alaska dated October 23, 2007, the Corps of Engineers states that the Juneau Wetland Management Plan is "consistent and compatible with the 404 (B)(1) Guidelines, but not duplicative of those guidelines" (Appendix I-C).

DEC Exclusion or "Carve-out"

The role of the Alaska Department of Environmental Conservation (DEC) is fully described in the Program Description for the Alaska Coastal Management Program, June 2, 2005, as approved by OCRM December 31, 2005. To summarize, per AS 46.04.040(b)(1), the issuance of DEC permits, certifications, approvals, and authorizations establishes consistency with the ACMP program for those activities of a proposed project subject to those permits, certifications, approvals or authorizations. And per AS 46.40.096(g), the reviewing entity shall exclude, or "carve out," from the consistency review and determination process the components of a project that are subject to authorization by DEC, which include all air, land or water quality determinations.

Furthermore, coastal district plans can not include any enforceable policies that address air, land or water quality. HB 191 provides that DEC's air, land and water quality standards are the exclusive standards of the ACMP for those purposes. AS 46.04.040(b). DNR has applied this requirement in 11 AAC 112.310 (air, land, water quality) and 11 AAC 114.270(f) (district enforceable policies). The Program Description for the Alaska Coastal Management Program, June 2, 2005, as approved by OCRM December 31, 2005 states "To the extent DEC already regulates this matter, a district may not write a policy on erosion. However.....under the newly amended 11 AAC 112.300(b)(9), important habitat designated under 11 AAC 114.250(h) must be managed for the special productivity of the habitat in accordance with 11 AAC 114.270(g)..... So erosion control measures, if they pertain to the special productivity of the habitat, are allowable."

Of the fourteen functions that form the basis for the Juneau Wetlands Management Plan classification system, Sediment/Toxicant Retention, Nutrient Export and Erosion Sensitivity may be construed to address matters regulated by DEC. To the contrary, these functions cannot be evaluated using drinking water standards. Upon closer inspection, it is clear that these functions are not being addressed from a DEC water quality perspective. Rather they are being addressed from the perspective of their contribution to the special productivity of the system as a whole and thus, should be allowed.

CONCLUSION

The wetlands mapped in the Juneau Wetlands Management Plan meet the criteria for designation as important habitats because (1) the use of the designated wetlands would have a direct and significant impact on coastal water; and (2) the designated wetlands are shown by written scientific evidence to be biologically and significantly productive.

The statewide wetlands standard is limited to avoiding, minimizing or mitigating significant adverse impacts to water flow and natural drainage patterns of saltwater (estuarine). The statewide standard fails to address the fourteen functions upon which the classification system is based, or provide a management prescription for the special productivity of these important freshwater (palustrine) wetland habitats. The federal statutes and regulations that provide authority to the COE to regulate the discharge of dredged or fill material into wetlands are broad in scope and general in application. The COE's binary system fails to provide a rating system, or ability to discriminate wetlands for management or mitigation. The Juneau Wetlands Management Plan addresses functions and management goals not adequately addressed by the state or federal laws.

Although the Juneau Wetlands Management Plan classification system is based, in part on, Sediment/Toxicant Retention, Nutrient Export and Erosion Sensitivity, there is no violation of the prohibition on district plans to address air land and water quality. These functions are not being addressed from DEC's water quality perspective. These functions cannot be described or evaluated using DEC's water quality standards. As with the State's example of erosion control measures, these three functions as described and applied in the Juneau Wetlands Management Plan are being addressed from the perspective of their contribution to the special productivity of the system as a whole and thus should be allowed.

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CHAPTER I

INTRODUCTION

SUMMARY

The Wetlands Management Plan of the City and Borough of Juneau (CBJ) is designed to:

- classify wetlands based on information regarding environmental functions, public preference for management, and practicable alternatives to wetlands development;
- provide the basis for reasoned decisions regarding protection and development of wetlands;
- require mitigation for development impacts that is appropriate for high value and lower value wetlands;
- increase permit predictability for wetland property owners; and
- reduce wetlands permit processing time and controversy for wetlands that are more suitable for development.

Wetlands management is important in Juneau because a significant portion of the community's remaining undeveloped land is wetlands and development pressures on these wetlands can be great. Wetlands are carefully regulated by the U.S. Army Corps of Engineers and the Environmental Protection Agency (EPA) under authority of the federal Clean Water Act because wetlands perform many important environmental functions. These functions include providing important habitat for fish, birds, and animals; nurturing commercial and sport fisheries; reducing flood damage; and abating water pollution. Wetlands can also be important sites for public recreation and scenic enjoyment. At the same time, many wetlands are in private ownership and are often proposed as development sites. The challenge of wetlands management is balancing wetlands' values as a productive part of the natural environment with the public interest in using certain wetland sites for development.

To achieve the plan's goals, the CBJ established a study area, evaluated the environmental functions of the wetlands within it, assessed the availability of upland alternatives to wetlands development for all of Juneau, and surveyed public preferences for wetlands management. These three factors were combined to produce a balanced wetlands management plan that classifies wetlands from higher value (called Category A and B) to lower value (Category C and D), and manages development and uses of those wetlands accordingly. The plan also identifies wetlands that have potential for enhancement of wetlands functions (Category EP). The quantitative methodology developed and used by the CBJ to classify wetlands is described in "Chapter II, Classification Methodology." In addition, in 2004, all A, B, C, D, and EP wetlands were proposed Designated Important Wetland Habitats under the revised Alaska Coastal Management Program. Those designations became effective in 2008.

The plan adopts enforceable policies that must be complied with before any development in wetlands can occur. Most importantly, the plan includes a wetlands mitigation policy patterned after the federal mitigation regulation implemented by the Corps of Engineers and other federal agencies. The plan also requires use of "best management practices" to prevent impacts to wetland functions and values. The policies of the plan are listed in "Chapter III, Wetland Management Policies."

The plan has been approved by the CBJ, the State of Alaska, and the U.S. Department of Commerce as part of the Alaska Coastal Management Program. The plan is the basis for General Permit 92-1 and subsequent General Permits 2000-01, -02, and -03, issued under Section 404 of the federal Clean Water Act by the U.S. Department of the Army, Corps of Engineers. The General Permits streamline the permitting process for the lower value wetlands covered by this plan by allowing the CBJ Wetlands Review Board to make permit decisions at the local level for development projects in those wetlands. The CBJ proposes to establish a Wetlands Mitigation Bank to assist project developers in meeting the mitigation requirements of the plan. These implementation features are described in "Chapter IV, Implementation."

The City and Borough of Juneau has seated a nine-member citizen's Wetlands Review Board to oversee Juneau's implementation of the Juneau wetlands plan. Board members are required to have expertise in fisheries biology, hydrology, soils, engineering or land use planning. The Board has the responsibility for implementing the wetlands management plan and issuing permits for projects in Category C, D and EP wetlands under the terms of the General Permit.

In addition to its management functions, the plan is an educational document that provides information about individual wetlands in Juneau. It indicates which wetlands contribute the most to the natural environment and what they contribute. The inventory of natural functional values gives very specific information for each wetlands area, including: water flow, salmon stream fish counts, and bird counts. The plan provides one of the most complete comparative wetlands inventories for an area of this size.

This Revised Juneau Wetlands Management Plan incorporates all aspects of the plan that were approved by the CBJ and the State and federal governments, including changes that were made to the *Juneau Wetlands Management Plan Concept Approved Draft* (dated February 1991) during these approval processes. This plan revision does not update the data that was used to prepare the original plan, nor alter the assumptions or methodology that led to the original wetland classifications that are the basis of the management scheme.

WETLANDS DEFINED

To most Juneau residents, the word "wetlands" evokes images of the extensive tidally flooded grasslands along Egan Drive. However, the laws that regulate development in wetlands apply to many areas that do not fit the conventional image of what a wetland looks like. Laws that address wetlands cover estuaries, streams, some forested areas, inland meadows, ponds, and artificial wetlands.

In 1986, the Corps of Engineers located and mapped many of Juneau's wetlands, as they have done in other areas of the United States. The definition used by the Corps of Engineers to identify wetlands subject to their jurisdiction under the Clean Water Act requires the presence of the following three features (Corps of Engineers Wetlands Delineation Manual, 1987):

1. Prevalence of plant species typically adapted for life in saturated soils;
2. Water sufficient to flood or saturate most of the soil surface for at least part of the growing season; and,
3. Soil conditions that indicate saturation (hydric soils).

This *Revised Juneau Wetlands Management Plan* and the *Juneau Wetlands Management Plan Map Atlas* (published in May 1994) classified only those wetlands located by the Corps of Engineers in the study area as of 1986. Many additional wetlands have been delineated by the Corps in these intervening years, and new wetlands subject to Corps jurisdiction are continually identified. Users of this plan should contact the CBJ Community Development Department or the Corps of Engineers staff in Juneau for information regarding whether a specific piece of property is wetlands, and what permitting rules apply.

CONTEXT AND HISTORY

A large proportion of the land area within the City and Borough of Juneau is classified as wetlands and is subject to the regulatory requirements of the federal Clean Water Act. Wetlands occupy 54 percent of the management plan study area. In the past 20 years, there have been many conflicts between those who want to develop wetland areas, many of which are privately owned, and those who are concerned that wetland functions and values are being impacted by development that could be located on non-wetland properties.

The developing areas of Juneau have been supplied with public water within the last 10 to 15 years as a result of a \$45 million expansion of the water distribution system, the largest capital project ever constructed by the CBJ. The water system encourages development in central corridors and prevents sprawl into environmentally sensitive rural areas. Public interest in developing along existing roads and infrastructure can be expected to continue and increase as Juneau's population grows. Many of the areas that will receive development pressure are wetlands.

Man-made development in Juneau's Mendenhall Valley area has progressed in roughly the following sequence.

1. Pre- World War II development consisted of several dairy farms near the mouth of Duck Creek and Jordan Creek, some fur farms on Duck Creek that utilized the salmon runs for animal food, and a few commercial vegetable gardens. The A-J Mine had constructed the Mendenhall Loop Road, which followed the same route as it does today. A few residences were scattered along its length. The airport was built in the 1930's. Airport construction altered the mouths of Jordan and Duck Creeks.

2. World War II brought an army camp into the Jordan Creek drainage and expanded construction at the Juneau Airport.
3. During the post-war years and into the early 1960's several significant events occurred:
 - a. Parts of the middle Jordan Creek drainage were logged or high-graded for timber, with little control over logging slash disposal in or near the stream;
 - b. Portions of the Mendenhall Loop Road were widened, using alluvial material from dredged ponds near the road; and,
 - c. The Duck Creek drainage, particularly near its headwaters, began to be urbanized, with the first tract home construction occurring in 1961.
4. During the past two decades urban development in the Mendenhall Valley has proceeded at an increased rate, particularly as a result of improved transportation and increased state employment. The present population of the Valley is estimated to exceed 10,000 people, an increase of 7,000 since 1967.

If future community growth is to remain an option, locations for industrial and residential development must be found. The natural values of wetlands must be taken into account in the planning process to satisfy existing laws and to assure that growth can progress in the most environmentally responsible manner without degrading our quality of life.

PLANNING PROCESS

To achieve the plan's goals, Juneau established a 15 square-mile wetlands study area. The study area encompasses most of the developing areas of Juneau, including: Mendenhall Valley, Auke Bay, Lemon Creek, and North Douglas. The study area excludes the Mendenhall State Game Refuge and all estuaries.

Through the planning process, the CBJ evaluated all wetlands within the study area that had been delineated by the Corps of Engineers (primarily by aerial photograph interpretation) as of 1986.¹ The plan: (1) evaluated the environmental functions of each wetland unit², (2) assessed the availability of practicable upland alternatives to wetlands development for all of Juneau, and (3) surveyed public preferences for the management of the wetland units³ in the study area.

¹ Additional wetlands have been delineated by the Corps of Engineers within the study area since 1986. These wetlands are not mapped, evaluated or categorized by the Juneau Wetlands Management Plan. Permitting for development in these wetlands is administered by the Corps of Engineers under the requirements of Section 404 of the Clean Water Act and its implementing regulations.

² The term "wetland unit(s)" is replaced by "Designated Important Habitat Wetland Management Categories" elsewhere in this document to conform to State of Alaska plan approval requirements.

³ *ibid.*

These three factors were then combined to produce a wetlands management plan that designates wetlands that are more suitable for development, and those that are less suitable, in advance of any specific development proposal. The four wetlands management categories used for this wetlands plan are Category A, B, C and D – ranging from the highest value wetlands that are least suitable for development, to the lower value wetlands that are most suitable for development. The plan also identified some possible enhancement potential (Category EP) wetlands, where wetland values can be restored and enhanced. The classifications of the Designated Important Wetland Habitat units within the study area are listed in Appendix II-D of this plan, and in the *Juneau Wetlands Management Plan Map Atlas* (May 1994).

Ninety percent of the wetlands within the study area (a total of approximately 2,600 acres) are classified as Category A or B. Ten percent, or a total of 300 acres, are classified as Category C or D. Six freshwater ponds were classified as Category EP, due to their enhancement potential.

A more stringent "Anadromous Stream and Lake Corridor Rule" classifies all wetlands within 50 feet of anadromous fish streams and lakes as the highest value, Category A, wetland type. This rule affects 22 Designated Important Habitat Wetland Management Categories. A special "Residential Road Corridor" classifies many wetlands within 100 feet of existing roads served by public water as lower value, Category C, wetlands.⁴ This less stringent designation ensures that single family homes will be permitted to locate along existing roads and make use of existing public utilities. This rule affects 124 residential lots within 15 Designated Important Wetland Management Categories.

By classifying each wetland area into one of the four primary management categories (Category A, B, C or D), the plan balances people's development needs with the public and environmental benefits that wetlands provide. These land management categories have been agreed to by the City and Borough of Juneau and the State and Federal government regulatory agencies. This agreement on the management approach for each wetland will decrease permit processing time, make permit decisions more predictable, and ensure that potential impacts from wetlands development will be fully evaluated and appropriately mitigated.

The *Revised Juneau Wetlands Management Plan* includes enforceable policies that will guide the issuance of permits for discharge of dredged or fill material in wetlands. Most importantly, the plan adopts a mitigation policy patterned after the federal "mitigation sequence," including requirements for avoidance, minimization, restoration and compensation. The plan requires appropriate mitigation for each wetland category.

⁴ Not all wetlands within 100 feet of existing roads and utilities are classified as Category C. In some cases, the higher value Category A or B classification was retained due to the presence of higher environmental functions and values at the site.

PLAN IMPLEMENTATION

On June 30, 1995, the Corps of Engineers issued General Permit 92-1 for wetlands that are classified as Category C, D, and EP in the Revised Juneau Wetlands Management Plan. On July 24, 2000, the Corps of Engineers issues four General Permits (2000-01, -02, -03 and -04) that replaced 92-1. On May 24, 2006, three of the General Permits (GP) were renewed: GP 2000-01, -02, -03. GP 2000-04 was not renewed due to lack of use. The General Permits authorize the discharge of fill material into wetlands, for the purpose of creating foundation pads for structures, utilities, associated roads, driveways, parking areas, and other domestic, governmental, and commercial development, as well as enhancement of certain environmental situations. These GPs authorize mechanized land clearing and other activities that could result in a re-deposition of fill material. Copies of both original and the new General Permits are included in Appendix II-F.

The Corps of Engineers has authorized the CBJ Wetlands Review Board to administer the General Permit through the permitting process outlined in this plan. The Board has the authority to issue wetland permits locally for the discharge of dredged or fill material in these lower value and enhancement wetlands (Category C, D and EP) for the purposes listed in the General Permit. The Board will issue permits in compliance with the enforceable policies of this plan and the specific and general conditions included in the General Permit.

For the Category C, D and EP wetlands, the CBJ has become a 'one-stop' wetlands permitting agency, greatly reducing permit processing time. No individual permit from the Corps of Engineers, consistency determination from the Alaska Department of Natural Resources, Office of Project Management and Permitting, nor individual water quality certification ("401 certification") from the Alaska Department of Environmental Conservation, is required for development in these wetlands. However, other local, State and federal permits may be needed for the project and it is the responsibility of the applicant to obtain all required permits.

For development proposals in Category A and B wetlands, and for any wetlands that are not within the Juneau Wetlands Management Plan study area or are not classified under the plan, a permit must still be obtained from the Corps of Engineers. The enforceable policies of the wetlands plan will be applied when those permit applications are reviewed by the Corps of Engineers.

The CBJ has committed to establish a Wetlands Mitigation Bank. The Bank will, in certain cases, allow permit applicants to compensate for damage to wetlands that will result from their development. The Mitigation Bank will allow development of certain wetlands that are generally suitable for development with no net loss of wetland functions and values in Juneau.

CHAPTER II

CLASSIFICATION METHODOLOGY

The City and Borough of Juneau (CBJ) established a 15 square mile study area for the Juneau Wetlands Management Plan (Map 1). The study area encompasses most of the developing areas of Juneau, including: Mendenhall Valley, Auke Bay, Lemon Creek, and North Douglas. The study area excludes the Mendenhall State Game Refuge and all estuaries.

The Juneau Wetlands Management Plan classifies Designated Important Wetland Management Categories within the study area into four main categories from higher value (Category A or B) to lower value (Category C or D) wetlands, and a fifth category for wetlands with particular potential for wetlands enhancement projects (Category EP). The Designated Important Wetland Management Categories will be managed, under the terms of the wetlands plan, in a manner appropriate to their value and classification.

The quantitative method used by the City and Borough of Juneau to classify its wetlands is detailed in this chapter. The enforceable policies that will be used to guide future management of the Designated Important Wetland Management Categories within each management category are listed in “Chapter III, Wetland Management Policies.”

The classification of the wetland units (which later became Designated Important Wetland Management Categories) was based on consideration of:

1. The environmental functions served by the wetland unit,
2. The public's preferences for protection or development of each wetland unit, and
3. The availability of non-wetland practicable alternative development sites.

As a result of the classification process, and policy decisions made during the plan review and approval process, the wetland acreage within the plan's study area was classified as follows:

Category A: 1228 acres (42.5 percent of the wetlands classified)

Category B: 1365 acres (47.2 percent of the wetlands classified)

Category C: 290 acres (9.9 percent of the wetlands classified)

Category D: 10 acres (0.3 percent of the wetlands classified)

Category EP: 6 ponds in the study area, acreage not calculated

JUNEAU WETLANDS MANAGEMENT PLAN STUDY AREA Management and Important Habitat Designations Index Map

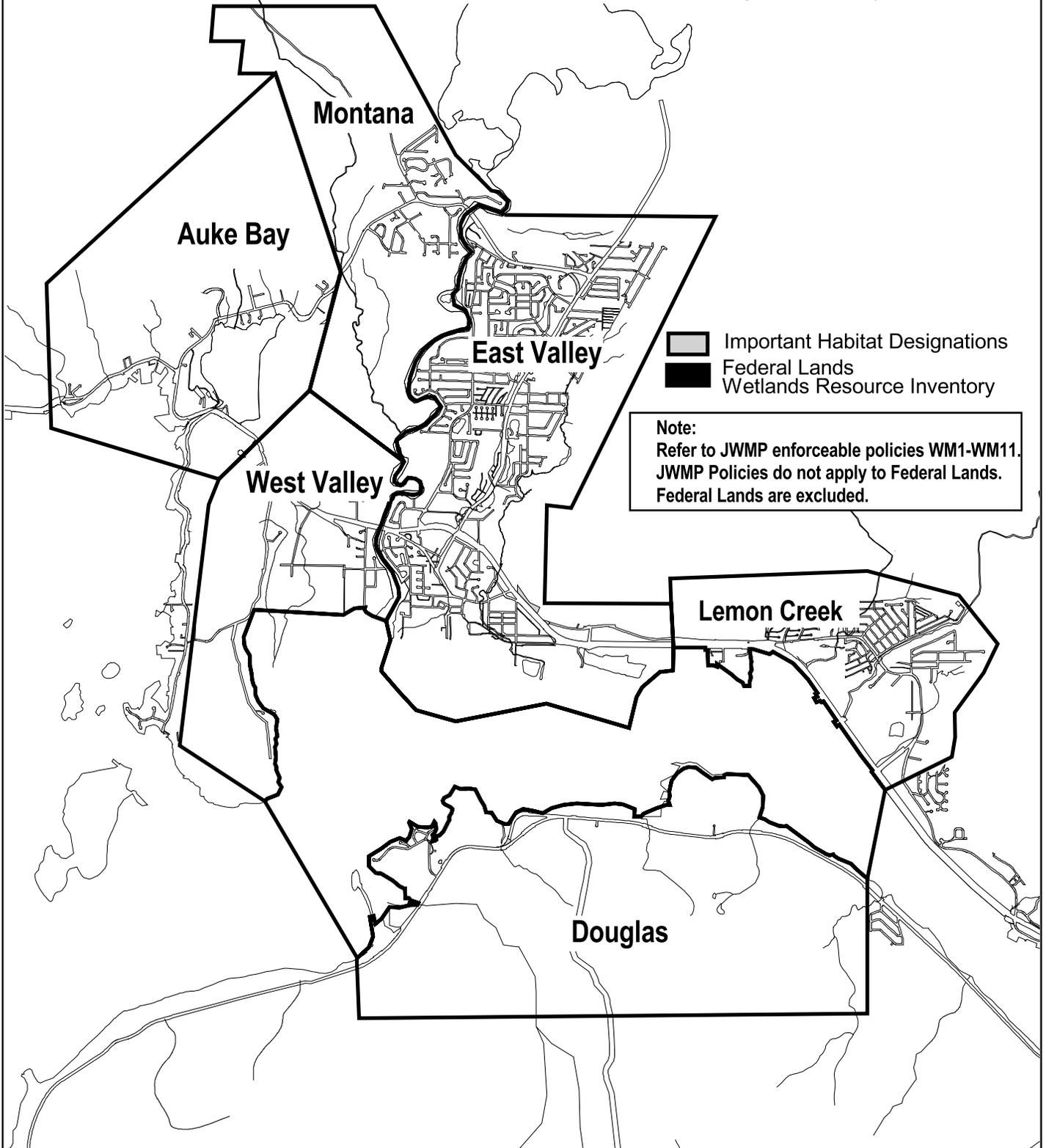
Juneau Coastal Management Plan
November 2007



800 0 800 Feet



Source: Base Maps: City & Borough of Juneau/Geographic Information System
Wetland Boundaries: Juneau Wetlands Management Plan- May 1994



BASIS FOR CLASSIFICATION

To classify its wetlands, Juneau comprehensively considered the same broad range of factors that are specified in the Corps of Engineers process for evaluating individual permit applications for the placement of dredged and fill material in wetlands.⁵ The Juneau Wetlands Management Plan considered each factor for all Designated Important Wetland Management Categories in advance of any individual permit application.

The Corps of Engineers' regulations state: "We have found through experience in administering the Section 404 discharge of dredge and fill permit program that wetlands vary in value. While some are vital areas, others have very little value; however, most are important."⁶ Although the Corps of Engineers states that most wetlands are important, the recognition that individual wetlands serve environmental functions that vary in value provides the rationale for classifying wetlands according to their relative value and using that classification as a basis for permitting decisions.

The Corps of Engineers reviews applications for permits to discharge dredged and fill material in wetlands in accordance with federal regulations found in 40 CFR, Part 230, commonly known as the "404(b)(1) guidelines." The Corps asks the Environmental Protection Agency (EPA) and other federal resource agencies to review the permit application to determine if the proposed use is "water dependent," and whether there are practicable alternatives to the proposed use if it is not water dependent.

Since all of the wetlands evaluated in the Juneau wetlands plan are interior freshwater wetlands (palustrine), very few permit applicants propose water dependent uses for these wetlands. The determination of the availability of practicable alternatives to wetland sites becomes crucial to the decision whether to issue a permit.

In addition to the practicable alternatives requirement, the Corps of Engineers' permitting process requires a broad-based public interest review that considers and balances a wide range of factors. The Corps of Engineers' regulations state:

All factors which may be relevant to the proposal must be considered, including the cumulative effects thereof: Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.⁷

This statement indicates that any management plan that identifies in advance how wetlands should be managed, must also be based on this comprehensive general balancing process. This comprehensive approach is achieved in the Juneau Wetlands Management Plan by its three components: (1) comparison of the environmental values of wetlands, (2) analysis of practicable alternatives for each type of land use (zoning classification), and (3) consideration of public preferences for management of each Designated Important Wetland Habitat unit.

⁵ Federal Register 33 CFR 320.4, November 13, 1986.

⁶ Federal Register 33 CFR, Supplementary Information, part 320 General Regulatory Policies, p. 41207, November 13, 1986.

⁷ Federal Register 33 CFR 320.4(8), November 13, 1986.

To classify the Designated Important Wetland Management Categories, each of the three components listed above was separately evaluated. Each Designated Important Wetland Habitat unit was assigned a “ranking” for each of the three components. The City and Borough of Juneau then created and used a new quantitative methodology to consolidate the data from the three components to generate an overall classification for each wetland (Category A, B, C, D or EP). The methodology for evaluating each component, and reaching a consolidated classification for each wetland, is described below.

ENVIRONMENTAL COMPONENT

The City and Borough of Juneau initiated the planning process by forming a Wetlands Interagency Technical Advisory Committee. The City and Borough of Juneau invited representatives from State and federal resource and land use agencies to nominate their own representatives to the committee. The purpose of the committee was to select a methodology to evaluate wetlands biological functions and to provide oversight for the field work and drafting of the environmental evaluation.

As a result of committee discussions and consultation with a representative of the National Wetlands Technical Council,⁸ the committee selected the Adamus Wetlands Evaluation Technique (WET) for the environmental assessment.⁹ Paul Adamus was retained to evaluate each of the study area wetlands that had previously been identified and mapped by the Corps of Engineers. The study area (see Map 1) includes the areas of Juneau that were experiencing development pressure and that were provided with a public water supply in the recent years preceding plan preparation. The field work for the environmental evaluation lasted one year, and the study team included researchers from Syracuse University, the State University of New York at Syracuse, and the University of Minnesota.¹⁰ A number of Juneau habitat biologists were employed to conduct field work, including bird surveys and fish counts. Professionals associated with the National Marine Fisheries Service Auke Bay Laboratory, and a variety of State and federal agencies and independent experts, made voluntary contributions.

ENVIRONMENTAL FUNCTIONS EVALUATED BY ADAMUS WET TECHNIQUE

Paul Adamus and his subcontractors evaluated fourteen functions for each freshwater (palustrine) wetland in the study area. These functions are:

1. **Recharge:** Downward flow of water to ground water aquifers.
2. **Discharge:** Upward flow of ground water, often into streams.
3. **Surface Hydrologic Control:** Moderation of stream water flow fluctuations caused by surface runoff. Important for restricting the velocity of runoff. Protects streams against flash flooding.
4. **Sediment/Toxicant Retention:** Natural filtering effect for filtering out toxicants and dirt by allowing particulate matter to settle out. Can be good if clear water is passed downstream. Can

⁸ Dr. Hank Sather, November 11, 1985, in Juneau, Alaska.

⁹ U.S. Dept. of Transportation, FHA, *A Method for Wetland Functional Assessment*, March 1983.

¹⁰ Dr. Don Siegel, Syracuse Univ., *The Recharge Discharge Function of Wetlands Near Juneau, Alaska: Part I & II*, with field work assistance from Dr. Paul Glaser, Univ. of Minnesota.

be harmful if the sediments collect on site and the site has salmon eggs or other sensitive aquatic specimens.

5. **Nutrient Export:** Transports nitrogen and phosphorous downstream or to estuaries. In the “Lower 48” states this can be harmful because too much nitrogen/phosphorous creates algae blooms which choke off oxygen. In Juneau, nutrient export is helpful because streams do not have a lot of nutrients.
6. **Riparian Support:** Foliage along a stream or lake shore. Stream side vegetation protects salmon eggs from too much sun in shallow waters. The foliage also provides nutrients when it falls into the water. Overhanging vegetation provides protection for salmon smolts.
7. **Erosion Sensitivity:** Wetlands with steep slopes are prone to rapid erosion.
8. **Salmonid Habitat:** Habitat for salmon and related species. There are two major habitat types: spawning for adults, and overwintering for juveniles. Of the two habitats, overwintering is often the most critical one determining species abundance.
9. **Disturbance Sensitive Wildlife:** Wildlife which cannot tolerate urbanization.
10. **Ecological Diversity:** The degree to which individual wetlands support a wide variety of plants or animals or has some unusual habitats. A significant component is range of bird species present.
11. **Replacement Cost:** Cost in terms of time needed to replicate a wetland environment. For example, a tidal wetland can be regenerated, but peat takes thousands of years.
12. **Downslope Beneficiary or Passive Economic Service:** A wetland is more important if it prevents flooding of downstream buildings and property.
13. **Recreation Actual:** Actual use as determined by results of public surveys.
14. **Recreation Potential:** Wetlands closest to roads were given a higher potential than isolated wetlands.

In applying the WET evaluation methodology to Juneau, Paul Adamus designed and calibrated his Rapid Assessment Technique to fit conditions in Southeast Alaska.¹¹ The Rapid Assessment provided an efficient way to derive a numerical value for individual wetland functions. The technique consisted of making field observations to answer a number of specific questions related to each wetland function.

As a result of the Rapid Assessment, each of the 14 wetland functions was scored within a range of “very low” to “very high” for potential presence or performance within each Designated Important Wetland Habitat unit. The scores for each function for each Designated Important Wetland Habitat unit are published in the *Juneau Wetlands Functions and Values, Map Appendix* (dated September 1987) and in Appendix II-E. The *Map Appendix* contains matrix charts and aerial photographs showing the environmental scores and basic land use information for each Designated Important Wetland Habitat unit. Land use information is provided regarding the availability of municipal water and sewer, property

¹¹ *Juneau Wetlands Functions and Values, Appendix D, Rapid Assessment Method for Southeast Alaska*, Adamus Resources Assessment, Inc., September 1987.

ownership, and comprehensive plan land use designations. See Figures 1 and 2 for sample pages from the *Map Appendix*.

Each aerial photo in the *Map Appendix* depicts one square mile of the study area. The photographs are reductions of the original 1:200 scale aerial photography that the Corps of Engineers used to identify the location of each wetland. The 1:200 scale is the same scale as the City and Borough of Juneau property ownership maps, a feature that enables plat maps to be overlaid on wetlands maps so that wetlands can be approximately located in relation to property lines, streets and other landmarks. There is some discrepancy due to natural curvature of aerial photography.

The data and conclusions from the environmental component are also published in *Juneau Wetlands Functions and Values* (dated September 1987). This publication gives more detailed information regarding the environmental data collected for the Designated Important Wetland Management Categories within each watershed in the study area.

“CONVERTED FUNCTIONAL VALUE” (ENVIRONMENTAL SCORE)

The City and Borough of Juneau developed and used a new quantitative methodology to consolidate the 14 environmental function scores assigned by Adamus’ Rapid Assessment Technique into one “converted functional value” (environmental score) that characterized the environmental importance of each Designated Important Wetland Habitat unit.¹² The four-step quantitative methodology is described below and illustrated in Figures 3 and 4.

1. **Categories of Environmental Functions:** The wetland functions rated by the Adamus WET Rapid Assessment were grouped into three major categories: (1) support for aquatic habitat, (2) support for human uses of the wetlands, and (3) support for terrestrial habitat. Thirteen of the 14 environmental functions scored by Adamus were grouped into these three categories.¹³ Figure 3 shows which functions were grouped into each category.
2. **Weighting Factors:** The City and Borough of Juneau derived “weighting factors” for each of the thirteen environmental functions (see Figure 3). The weighting factors allowed the following four issues to be considered when scoring each of the environmental functions for each Designated Important Wetland Habitat unit:
 - a. **Confidence:** Ability to extrapolate values for a Designated Important Wetland Habitat unit based on direct measurements of other wetlands. Confidence is high for all functions except recreation,
 - b. **Component Contribution:** Relative contribution of the function to the Aquatic Support, Human Use Support, or Terrestrial Support category. Note that within the Human Use Support category, the groundwater recharge function of wetlands (the downward flow of water to aquifers) was considered relatively important when public water was not available, but was considered less important when public water was available.

¹² *Weighting Procedure and Formula*, Ira Winograd, City and Borough of Juneau, Department of Community Development, April 13, 1988.

¹³ One of the fourteen Adamus WET functions, “ecological replacement cost,” was not considered in the consolidation process because it does not contribute to the aquatic, human or terrestrial habitat. It is a measure of the geologic time that it takes to naturally replicate a given-wetland. For example, estuarine wetlands are created in less time than peat wetlands.

FIGURE 1

SAMPLE PAGE FROM

JUNEAU WETLANDS FUNCTIONS AND VALUES, MAP APPENDIX

SHEET 54

S2S, T40S, R66E, C. R. P.

WETLAND EVALUATION RESULTS

| FUNCTION | WETLAND VALUES | | | | | | | |
|----------------------------------|----------------|-----|------|-----|-----|-----|-----|-----|
| | MV1 | MV2 | MV3A | MV4 | MV5 | MV6 | MV7 | MV8 |
| Groundwater Discharge | L | L | L | L | L | L | L | L |
| Groundwater Recharge | L | L | L | L | L | L | L | L |
| Surface Hydrologic Control | H | H | H | H | H | H | H | H |
| Groundwater Pollution | H | H | H | H | H | H | H | H |
| Wildlife Habitat | H | H | H | H | H | H | H | H |
| Transect Support | H | H | H | H | H | H | H | H |
| Transect Sensitivity | L | L | L | L | L | L | L | L |
| Wetland Wetlands | H | H | H | H | H | H | H | H |
| Disturbance Sensitivity Wetlands | H | H | H | H | H | H | H | H |
| Regional Ecological Diversity | H | H | H | H | H | H | H | H |
| Historical Wetland Values | L | L | L | L | L | L | L | L |
| Historical Wetland Values | L | L | L | L | L | L | L | L |
| Historical Wetland Values | L | L | L | L | L | L | L | L |
| Historical Wetland Values | L | L | L | L | L | L | L | L |
| Historical Wetland Values | L | L | L | L | L | L | L | L |
| Historical Wetland Values | L | L | L | L | L | L | L | L |
| Historical Wetland Values | L | L | L | L | L | L | L | L |
| Historical Wetland Values | L | L | L | L | L | L | L | L |

| FUNCTION | WETLAND VALUES | | | |
|----------------------------------|----------------|-----|-----|-----|
| | MV1 | MV2 | MV3 | MV4 |
| Groundwater Discharge | L | L | L | L |
| Groundwater Recharge | L | L | L | L |
| Surface Hydrologic Control | H | H | H | H |
| Groundwater Pollution | H | H | H | H |
| Wildlife Habitat | H | H | H | H |
| Transect Support | H | H | H | H |
| Transect Sensitivity | L | L | L | L |
| Wetland Wetlands | H | H | H | H |
| Disturbance Sensitivity Wetlands | H | H | H | H |
| Regional Ecological Diversity | H | H | H | H |
| Historical Wetland Values | L | L | L | L |
| Historical Wetland Values | L | L | L | L |
| Historical Wetland Values | L | L | L | L |
| Historical Wetland Values | L | L | L | L |
| Historical Wetland Values | L | L | L | L |
| Historical Wetland Values | L | L | L | L |
| Historical Wetland Values | L | L | L | L |

NOTE: Some rating codes are followed by a number (e.g. M4). This number has no value connotation, but is used to reference the specific criterion used to arrive at the rating. (See Sec. 2.2).

SOURCE: "Juneau Wetlands: Functions and Values", Adams Resource Assessment, Inc., August 1987.

LAND USE INFORMATION

| | MV1 | MV2 | MV3A | MV4 | MV5 | MV6 | MV7 | MV8 |
|-----------------------|-------|-----|------|-----|-----|-------|-----|-------|
| MUNICIPAL WATER | H | E | H | H | E | E | H | E |
| MUNICIPAL SEWER | H | H | H | H | H | H | H | H |
| PROPERTY OWNERSHIP | H | H/P | H | H | H/P | H/P | H | H/P |
| COMP PLAN DESIGNATION | RM/TA | U | I | TA | I | RM/TA | RS | RM/TA |

| | MV1 | MV2 | MV3 | MV4 |
|-----------------------|-------|-----|-----|-----|
| MUNICIPAL WATER | E | E | H | E |
| MUNICIPAL SEWER | H | H | H | H |
| PROPERTY OWNERSHIP | H/P | H/P | H | H |
| COMP PLAN DESIGNATION | RM/TA | U | I | TA |

EXPLANATION OF DATA:

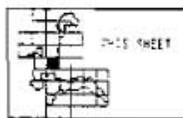
- Municipal Water:**
 - E = EXISTING WATER:** The wetland is within the existing municipal water system.
 - F = FUTURE WATER:** The wetland is within the Municipal Water System Five-Year Expansion Plan Map, Jan. 19, 1984.
 - H = NOT WATER:** The wetland is not served by municipal water, but is not within the planned expansion of the water system.
- Municipal Sewer:**
 - YES or NO:** Indicates whether the wetland, or a portion of it, is served by the Municipal sewer system.
- Property Ownership:**
 - H = MUNICIPAL (L&L)**
 - P = PRIVATE**
 - E = STATE (INCLUDING O&G)**
 - F = FEDERAL**
- Comprehensive Plan Designations:**
 - RS** = Resource Reserve
 - OS** = Open Space
 - RDH** = Rural Dispersed Residential
 - RLD** = Rural Low Density Residential
 - LDL** = Urban Low Density Residential
 - MD** = Medium Density Residential
 - TA** = Transition Area (Increased density when serviced by municipal water)
 - CC** = Neighborhood Commercial
 - GC** = General Commercial
 - MC** = Medium Density Commercial
 - HC** = High Density Commercial
 - IC** = Industrial
 - IP** = Institutional/Public Use

* Property ownership designations are for general reference; property line alignments are not guaranteed.

SOURCES: Municipal Water System - Five Year Expansion Plan Map, CBJ Engineering Dept., rev. Feb. 1987.
 O&G Street and Property Atlas, CBJ Dept. Community Development, rev. Jan. 1987.
 FAU Comprehensive Plan, CBJ Dept. Community Development, April 1984.

FIGURE 2

SAMPLE PAGE FROM
JUNEAU WETLANDS FUNCTIONS AND VALUES, MAP APPENDIX



APPROXIMATE SCALE: 1"=400'
 200' 0 500'

SHEET 34
 S25, T40S, R63E, C.R.M.

| FISHERIES SURVEY LEGEND | |
|--|---|
| REARING | SPAWNING |
| SEASON CODE SW = SUMMER W = WINTER SC or WC = SALMON NO SALMON TO FISH PC, ND | SPECIES CODE C = coho salmon CT = cutthroat trout D = dolly varcaen char H = chum salmon P = pink salmon S = sockeye salmon SH = steelhead |

| RATINGS: |
|--------------------|
| VH = VERY HIGH |
| H = HIGH |
| MH = MODERATE-HIGH |
| M = MODERATE |
| ML = MODERATE LOW |
| L = LOW |
| VL = VERY LOW |
| - = NO RATING |

| LEGEND: |
|-------------------------------------|
| [Solid line] STUDY AREA |
| [Dashed line] WETLANDS BOUNDARY |
| [Dotted line] STREAMS & TRIBUTARIES |

| LOCATION OF MONITORING STATIONS: |
|-----------------------------------|
| W = WATER QUALITY |
| C = STAFF GAUGE |
| G = GROUNDWATER (Piezometer nest) |
| S = SEDIMENT |

SOURCE: WETLAND POLYNOMIALS, JUNEAU, AND VICINITY. Air Photo Mylar Supplied by: Air Photo Tech, Inc. Preliminary Wetland Mapping by: Cto Water Engineers, Inc. Final Wetland Mapping by: Alaska District Corps of Engineers, Regulatory Branch. Date of Photograph: 9/24/84. ARA final mapping by: CDE Department of Community Development, 8/87

CAUTION: Many small wetlands not shown are protected by law, as are all wetlands shown, regardless of their ratings.

- c. **Sensitivity to Human Presence:** Direct sensitivity of the function to dredge and fill activity and/or indirect sensitivity based on general human activity. For example, the groundwater discharge function was considered to be “insensitive” since a wetland will continue to discharge (produce an upward flow of water) regardless of surface disturbance. However, the salmonid habitat function was considered to be “sensitive” since salmonids are very vulnerable to human presence. If you build a house on a wetland that discharges water, the basement will flood as discharge continues. However, if you build a house near a wetland that supports salmonid habitat, salmon populations can decrease over time as people occupy the house and use the adjacent wetlands.
- d. **Economic Value Based on Availability of Substitutes:** The relative importance of the wetland in providing the environmental function, in light of any alternative means to perform the function. For this factor, the weight is in inverse proportion to the relative availability of natural and artificial substitutes for the wetlands function. For example, the weighting score is relatively low for the sediment toxicant retention function because there are artificial ways to perform this function such as public sewer systems. But, the weighting score for the riparian support function is relatively high because there is no substitute for the habitat and temperature control provided by stream side vegetation.

The “weighting factor” used for one wetland function, groundwater recharge, varied depending on whether the property was served by the public water system. With this exception, the weighting factors were the same for each function in every Designated Important Wetland Habitat unit.

- 3. **Equalization Factors:** The City and Borough of Juneau applied “equalization factors” to equalize the contribution of the Aquatic Support, Human Use Support and Terrestrial Support categories to the final “converted functional value” (environmental score). This was necessary since there were not an equal number of wetland functions grouped under each of these three categories. For example, six wetland functions were grouped under the Aquatic Support category, whereas only two functions were grouped under the Terrestrial Support category. If the various wetland functional scores were simply added together within each category to determine the “converted functional value,” then the Aquatic Support category would always have the greatest influence over the final environmental score for the Designated Important Wetland Habitat unit. The use of the “equalization factors” ensured that each of the three categories had an opportunity to contribute equally to the final environmental score for each Designated Important Wetland Habitat unit.

FIGURE 3

**CALCULATION OF "WEIGHTING FACTORS"
FOR EACH CATEGORY OF ENVIRONMENTAL FUNCTIONS**

In the charts below: 1 = Small positive correlation.
2 = Intermediate or indeterminate positive correlation.
3 = Strong positive correlation.

AQUATIC SUPPORT CATEGORY

| WETLAND FUNCTION | CONFIDENCE | COMPONENT CONTRIBUTION | SENSITIVITY TO HUMAN USE | AVAILABILITY OF SUBSTITUTES | TOTAL= "WEIGHTING FACTOR" |
|-----------------------------|------------|------------------------|--------------------------|-----------------------------|---------------------------|
| Discharge | 3 | 2 | 1 | 3 | 9 |
| Sediment/Toxicant Retention | 3 | 1 | 1 | 1 (discharge controls) | 6 |
| Nutrient Export | 3 | 1 | 1 | 2 | 7 |
| Riparian Support | 3 | 2 | 2 | 3 | 10 |
| Salmonid Habitat | 3 | 3 | 3 | 2 (hatcheries) | 11 |
| Erosion | 3 | 1 | 1 | 2 (drainage controls) | 7 |

HUMAN USE SUPPORT CATEGORY

| WETLAND FUNCTION | CONFIDENCE | COMPONENT CONTRIBUTION | SENSITIVITY TO HUMAN USE | AVAILABILITY OF SUBSTITUTES | TOTAL= "WEIGHTING FACTOR" |
|-----------------------|------------|------------------------|--------------------------|-----------------------------|---------------------------|
| Recharge | 3 | 1 or 3* | 2 | 1 OR 3* | 7 or 11* |
| Recreation Potential | 1 | 1 | 1 | 2 | 5 |
| Recreation Actual | 1 | 2 | 1 | 2 | 6 |
| Hydrologic | 3 | 3 | 1 | 2 (drainage controls) | 9 |
| Downslope Beneficiary | 3 | 3 | 1 | 2 (drainage controls) | 9 |

* Value used depends on whether CBJ public water is present at the wetland unit.

TERRESTRIAL SUPPORT CATEGORY

| WETLAND FUNCTION | CONFIDENCE | COMPONENT CONTRIBUTION | SENSITIVITY TO HUMAN USE | AVAILABILITY OF SUBSTITUTES | TOTAL= "WEIGHTING FACTOR" |
|------------------|------------|------------------------|--------------------------|-----------------------------|---------------------------|
| Disturbance | 3 | 3 | 3 | 3 | 12 |
| Diversity | 3 | 3 | 2 | 3 | 11 |

The following "equalization factors" were applied. Two sets of equalization factors were used, depending on whether the Designated Important Wetland Habitat unit was supplied with public water.

Aquatic Support category = 1.082 or 1.113

Human Use Support category = 1.251 or 1.159

Terrestrial Support category = 0.783 or 0.806

4. **Final Environmental Score:** Using the quantitative factors derived above, the City and Borough of Juneau developed a "converted functional value" (environmental score) for each Designated Important Wetland Habitat unit as follows (see Figure 4). For each Designated Important Wetland Habitat unit, each of the thirteen wetland functions was scored from 1 (for a "very low" Adamus rating) to 7 (for a "very high" Adamus rating) based on the results of the Adamus WET Rapid Assessment. Each functional score was then multiplied by the applicable "weighting factor" (see Figure 3). The weighted scores were tallied within the Aquatic Support, Human Use Support and Terrestrial Support categories. Mean scores were derived for each category. The mean score for each category was then multiplied by the applicable "equalization factor" to yield a "Final Score" within each category of environmental functions. Finally, the "Final Scores" for each category were added together to yield a single environmental score, called the "converted functional value," for each Designated Important Wetland Habitat unit.

The "converted functional values" (environmental scores) for Designated Important Wetland Management Categories in the study area ranged from approximately 55 at the low end to 155 at the high end. However, the scores were not evenly distributed. Many Designated Important Wetland Management Categories have scores around 75, and many others have scores around 110. The environmental scores for the Designated Important Wetland Management Categories are listed in Appendix II-D.

The distribution of the "converted functional values" (environmental scores) for all of the Designated Important Wetland Management Categories is shown in Figure 5. This frequency distribution shows that, within the study area, Designated Important Wetland Management Categories fell into five visual evident clusters. The exact placement of the boundaries of each cluster was accomplished by statistical calculation to determine which scores lie within or beyond one standard deviation from the peak of each cluster.

PUBLIC PREFERENCE COMPONENT

After evaluating each Designated Important Wetland Habitat unit's individual functions and publishing the findings in the *Juneau Wetlands Functions and Values, Map Appendix*, large-scale display maps were created to show each function. Three acetate overlays were used to show the relative values for each function: one overlay for "very low" and "medium low" values; one acetate overlay for "medium low", "medium", and "medium high" values; and one overlay for "high" and "very high" values.

FIGURE 4

**CALCULATION OF "FINAL SCORES"
FOR EACH CATEGORY OF ENVIRONMENTAL FUNCTIONS**

AQUATIC SUPPORT CATEGORY

| WETLAND FUNCTION | ADAMUS SCORE | WEIGHTING FACTOR (See Figure 3) | ADAMUS SCORE x WEIGHTING FACTOR = |
|-----------------------------|---|------------------------------------|---|
| Discharge | Score of 1 - 7, depending upon Adamus ranking for each wetland function (VL=1, L=2, ML=3, M=4, MH=5, H=6, VH=7) | 9 | |
| Sediment/Toxicant Retention | " | 6 | |
| Nutrient Export | " | 7 | |
| Riparian Support | " | 10 | |
| Salmonid Habitat | " | 11 | |
| Erosion | " | 7 | |
| | | | "RAW WEIGHTED SCORE" = TALLY OF ABOVE SCORES |

"Mean raw weighted score" for Aquatic Support category = Raw weighted score divided by 6

"FINAL SCORE" for Aquatic Support category = Mean raw weighted score x 1.082 or 1.113 (equalization factor)

HUMAN USE SUPPORT CATEGORY

| WETLAND FUNCTION | ADAMUS SCORE | WEIGHTING FACTOR (See Figure 3) | ADAMUS SCORE x WEIGHTING FACTOR = |
|-----------------------|---|------------------------------------|---|
| Recharge | Score of 1 - 7, depending upon Adamus ranking for each wetland function (VL=1, L=2, ML=3, M=4, MH=5, H=6, VH=7) | 7 or 11* | |
| Recreation Potential | " | 5 | |
| Recreation Actual | " | 6 | |
| Hydrologic | " | 9 | |
| Downslope Beneficiary | " | 9 | |
| | | | "RAW WEIGHTED SCORE" = TALLY OF ABOVE SCORES |

* Value used depends on whether CBJ public water is present at the wetland unit.

"Mean raw weighted score" for Human Use Support category = Raw weighted score divided by 5

"FINAL SCORE" for Human Use Support category = Mean raw weighted score x 1.251 or 1.159 (equalization factor)

FIGURE 4 (Continued)

**CALCULATION OF "FINAL SCORES"
FOR EACH CATEGORY OF ENVIRONMENTAL FUNCTIONS**

TERRESTRIAL SUPPORT CATEGORY

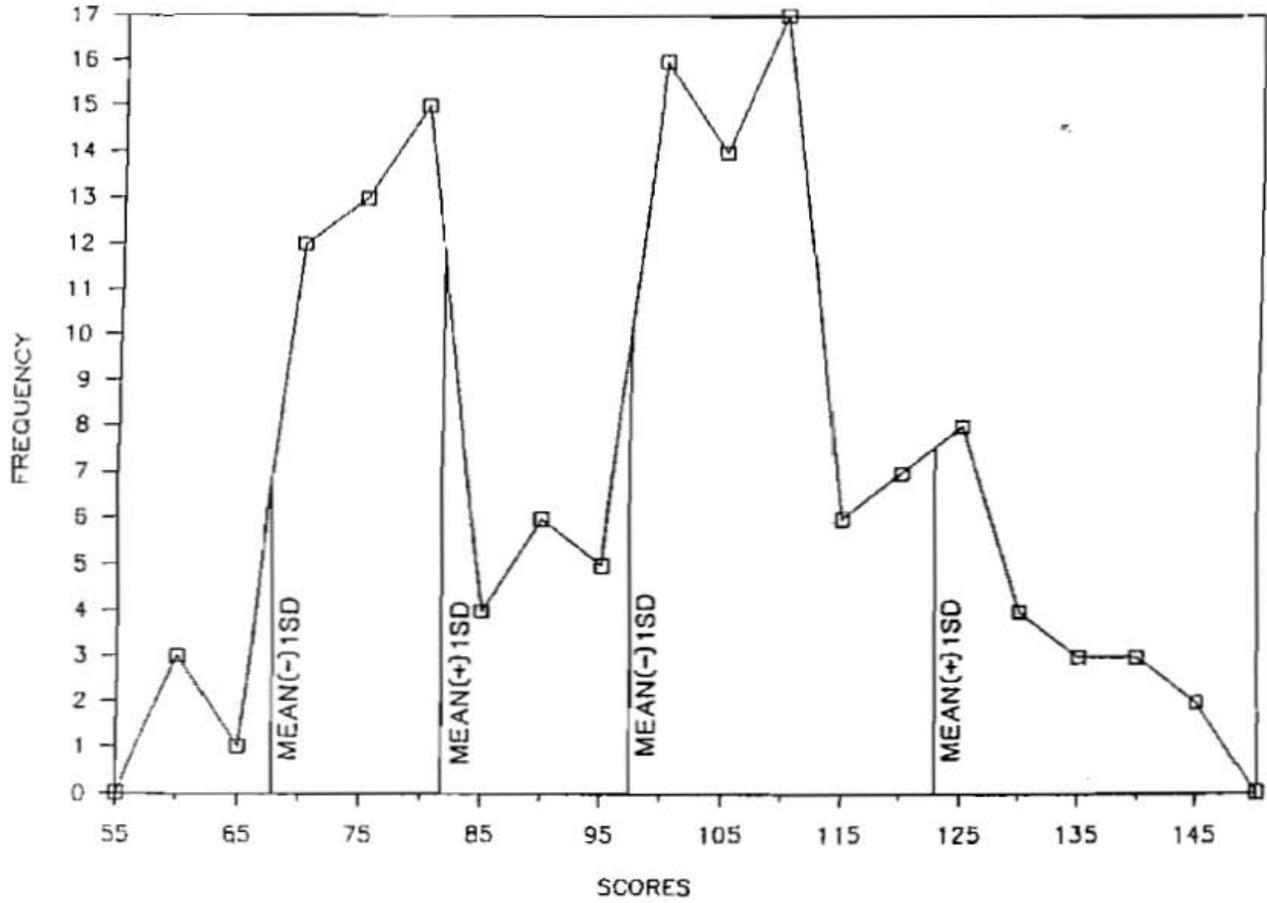
| WETLAND FUNCTION | ADAMUS SCORE | WEIGHTING FACTOR (See Figure 3) | ADAMUS SCORE x WEIGHTING FACTOR = |
|------------------|---|------------------------------------|---|
| Disturbance | Score of 1 - 7, depending upon Adamus ranking for each wetland function (VL=1, L=2, ML=3, M=4, MH=5, H=6, VH=7) | 12 | |
| " | " | 11 | |
| | | | "RAW WEIGHTED SCORE" = TALLY OF ABOVE SCORES |

"Mean raw weighted score" for Terrestrial Support category = Raw weighted score divided by 2

"FINAL SCORE" for Terrestrial Support category = Mean raw weighted score x 0.783 or 0.806 (equalization factor)

FIGURE 5

FREQUENCY DISTRIBUTION OF WETLANDS EVALUATION RESULTS



Additional acetate overlays were prepared for relevant land use functions. These functions included developability, location of public water and sewer and proposed public utilities, property ownership, comprehensive plan land use designations, and topography. Over 100 multi-colored display maps were produced by the City and Borough of Juneau to illustrate the environmental and land use findings for the Designated Important Wetland Management Categories in the study area.

Each map was divided into separate neighborhoods: Auke Bay, East Valley, North Douglas, Lemon Creek, Montana Creek, and West Valley. Community meetings were held in each neighborhood for presentation of the maps and explanation of the wetlands units' environmental functions. Meetings were held at the Auke Bay Elementary School, Floyd Dryden Junior High, Douglas Library, Switzer Village Recreation Hall, Mendenhall River Elementary School, Mendenhall Mall Library, and City Hall.

PUBLIC PREFERENCE SURVEY

A special survey called the *Blue Book* was distributed at the public meetings to solicit the wetlands management preferences of the people attending the meetings.¹⁴ Figure 6 shows a sample page from the *Blue Book* survey. Each meeting started with introductory explanations of the wetlands functions and land use findings. Participants were given a chance to review the large map overlays. They were then asked to fill out multiple choice responses in the chapter of the *Blue Book* corresponding to their neighborhood.

For each Designated Important Wetland Habitat unit, the same set of multiple choice questions was asked. Using scores between 1 and 5, people were asked to state their preference for wetlands development or protection. The *Blue Book* corresponded page for page to the published *Wetlands Functions and Values Map Appendix*; however, instead of listing the wetland scores for environmental functions, each *Blue Book* contained only a blank box for the multiple choice protection/development preference score for each wetland and space for written comments.

The public survey results are published in a *Results Blue Book*¹⁵ which shows the mean public preference score and standard deviation for each Designated Important Wetland Habitat unit. The document also consolidates all written public comments for each Designated Important Wetland Habitat unit.

A frequency distribution of the individual wetland management public preference scores was statistically calculated and the Designated Important Wetland Management Categories (previously termed Designated Important Wetland Habitat units) were divided into five public preference categories corresponding to the number of environmental categories. Figure 7 shows the public opinion frequency distribution.

¹⁴ Juneau Wetlands Functions and Values: Land Management, Resident Comments, September 1987; Ira Winograd, project manager; Jere Smith, graphic artist; City and Borough of Juneau.

¹⁵ Juneau Wetlands Functions and Values: Land Management, Resident Comments - Results, March 1987; Ira Winograd, project manager; Jere Smith, graphic artist; City and Borough of Juneau.

FIGURE 6

SAMPLE PAGE FROM THE *BLUE BOOK SURVEY*

| | | | | | | |
|------------------------|-----|-----|------|-----|-----|-----|
| SHEET 54 | | | | | | |
| WETLAND NUMBER | MW2 | MW3 | MW3A | MW4 | MW5 | MW6 |
| LAND USE RATING | | | | | | |

| | | | | | | |
|------------------------|------|------|------|------|------|------|
| WETLAND NUMBER | MW17 | MW19 | MW21 | MW22 | MW23 | MW60 |
| LAND USE RATING | | | | | | |

RATINGS:

- 1 = HIGH DEVELOPMENT; (e.g. Commercial/Industrial)
- 2 = MODERATE DEVELOPMENT; (e.g. Residential Subdivisions)
- 3 = LOW DEVELOPMENT; (e.g. 2.5 acre Residential Lots)
- 4 = NO DEVELOPMENT
- 5 = RETAIN CURRENT COMPREHENSIVE PLAN DESIGNATION
- 6 = NO OPINION OR UNCERTAIN

COMMENTS: _____

DO YOU OWN ONE OF THE PRIVATELY OWNED WETLANDS? IF SO PLEASE CIRCLE THE WETLAND AND WRITE YOUR NAME AND ADDRESS.

(page # same as map appendix)

For the sake of comparison of the preferences of the general public and the people who attended the public meetings, the City and Borough of Juneau also sponsored a random mail survey that asked general questions about preferences for management of hypothetical wetlands. These same general questions were asked of 100 people who attended an introductory wetlands meeting in the Mendenhall Library just prior to the neighborhood meetings. A comparison of the two groups is shown in Figure 8.¹⁶ The exercise showed that the participants in public meetings held more polarized views regarding wetlands management in comparison to the random survey respondents. In addition, the meeting participants had a stronger preference for protection than the general public. Since the public preference component used in the Juneau Wetlands Management Plan was based solely on the response of public meeting participants, it represents more polarized scores and a stronger preference for wetlands protection than would be obtained by a survey of the general Juneau public.

PRACTICABLE ALTERNATIVES COMPONENT

The practicable alternatives component of the Juneau Wetlands Management Plan was based on the Environmental Protection Agency 404(b)(1) regulations implementing the Clean Water Act. The regulations state that permits should not be granted for non-water-dependent activities on wetlands unless there are no practicable alternatives to wetlands development. Practicable alternatives are defined as follows:

An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized or expanded or managed in order to fulfill the basic purpose of the proposed activity, may be considered.¹⁷

This requirement has been controversial because most wetlands subject to development interest in Juneau are located away from the coast, so are obviously not suitable for water-dependent uses. Furthermore, there are limited upland (non-wetland) alternative sites for many types of development. Juneau receives 100 inches of rain a year and the habitable areas are hemmed in by one of the world's tallest coastal mountain ranges. Due to Juneau's extreme topography and climate, an unusually high percentage of available land is wetlands. This circumstance of nature leaves a relatively small amount of dry flat land available as a practicable alternative to wetlands development.

¹⁶ Dr. James Palmer and Dr. Richard Smardon, State Univ. of New York at Syracuse, *Measuring Human Values Associated with Wetlands: Comparing Public Meetings and Sample Surveys*, p. 36.

¹⁷ Federal Register 40 CFR Part 230.10(a)(2), December 24, 1980.

FIGURE 7

FREQUENCY DISTRIBUTION OF PUBLIC OPINION RESULTS

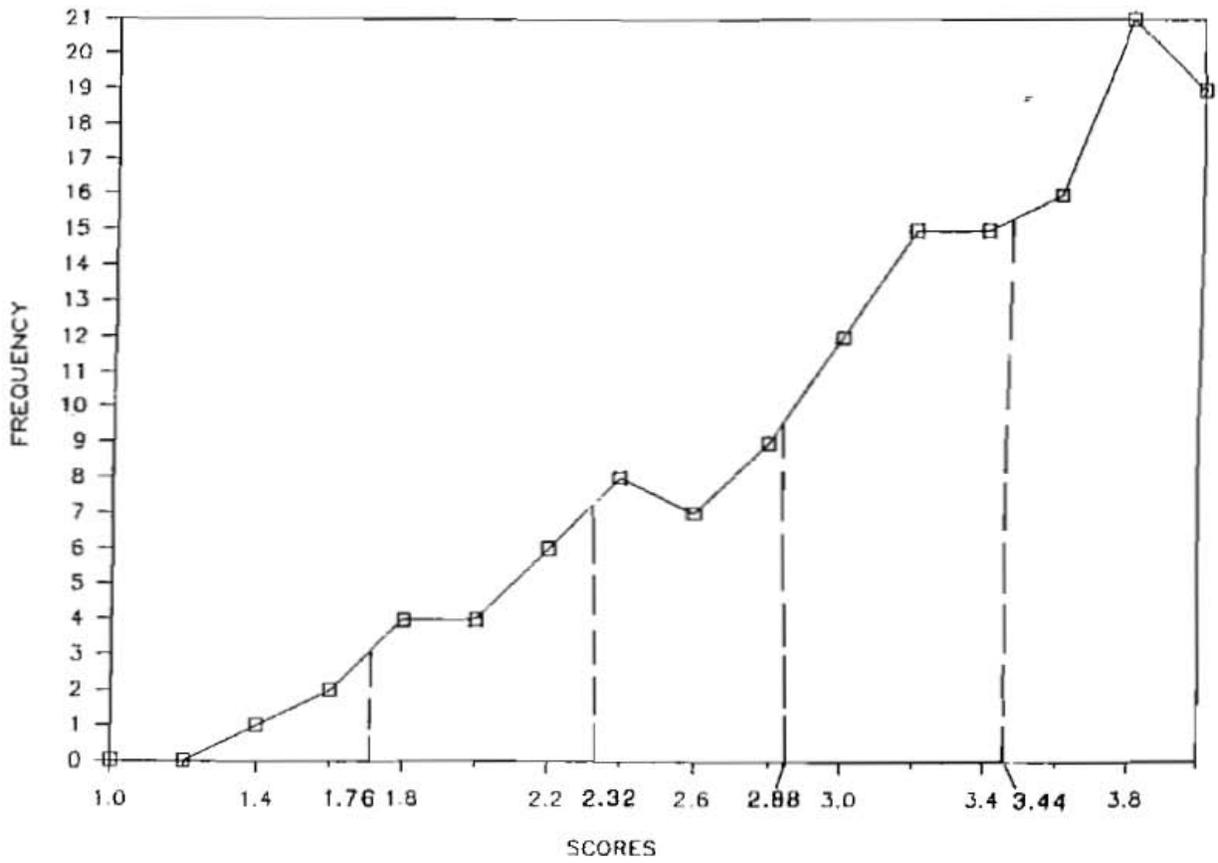
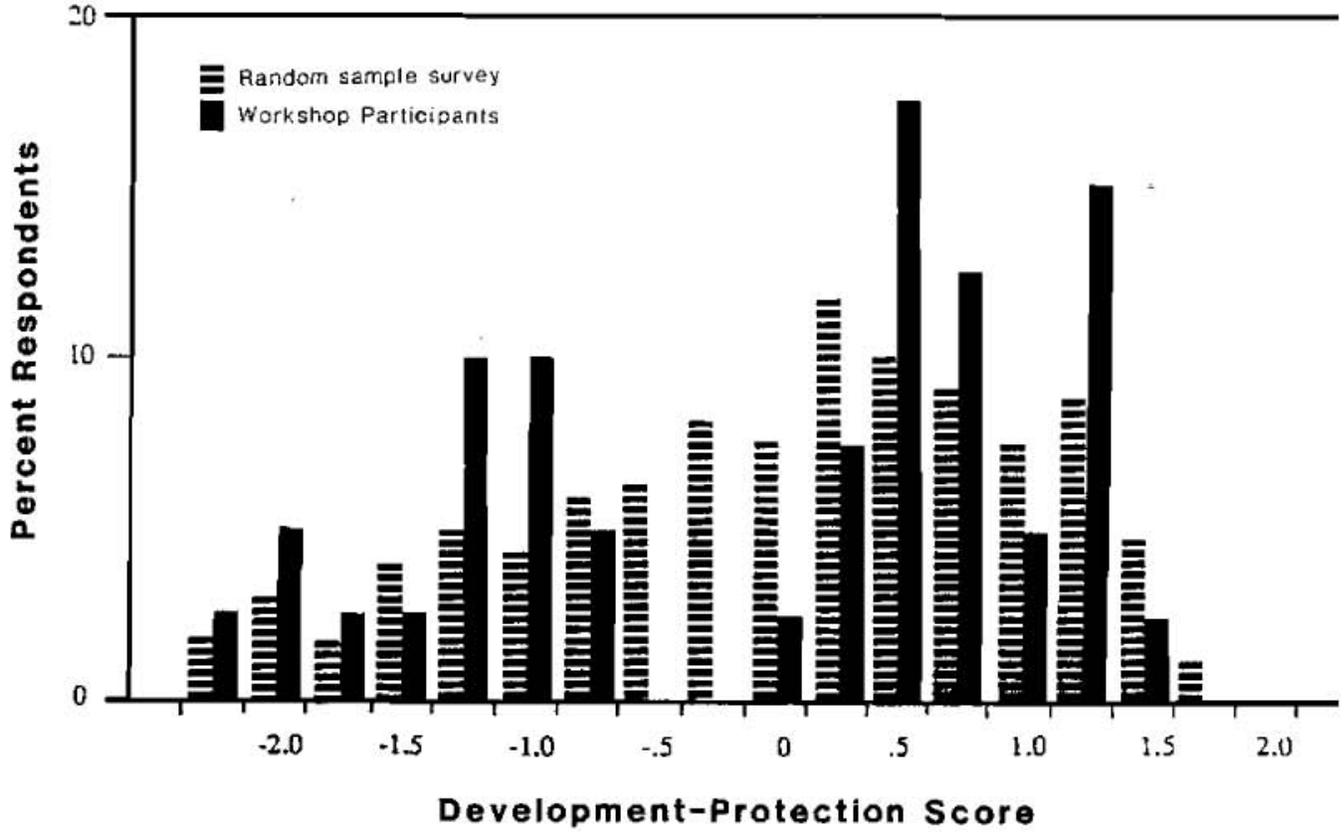


FIGURE 8

**DISTRIBUTION OF PUBLIC PREFERENCE SCORES
FOR SURVEY AND WORKSHOP PARTICIPANTS**



-2=Development Extreme

+2=Protection Extreme

Some development projects proposed on wetland sites in Juneau remained in the permit review stage, without resolution, for several years because of arguments regarding the availability of practicable alternative sites. In the past, some applicants have selected a site for development and then were informed when they applied for a permit that they should have picked a less environmentally sensitive site. The Juneau Wetlands Management Plan attempts to resolve this situation by evaluating practicable alternatives on a comprehensive basis. For each land use (zoning) district, an inventory was conducted to determine the availability of upland (non-wetland) practicable alternative sites. Practicable alternatives for each type of land use were ranked according to availability.

PRACTICABLE ALTERNATIVES INVENTORY

The area inventoried for practicable alternatives was larger than the plan's environmental study area valued by the Adamus WET method. It included most of the roaded area of Juneau, including downtown Juneau and Douglas. Thus, the inventory measured the relative need for additional land for development in urban and suburban Juneau. Maps 1 and 2 show the relationship between the Adamus WET Rapid Assessment study area (Map 1) and the practicable alternatives land use inventory study area (Map 2).

The practicable alternatives inventory compared land supply to demand by comparing developable uplands (non-wetlands) to all developed land. Each type of land use can be located only in a zoning district that allows that particular use. The "supply" of each type of land is represented by the amount of developable vacant upland in each zoning district. The "demand" for land is represented by the amount of developed land in each zoning district.

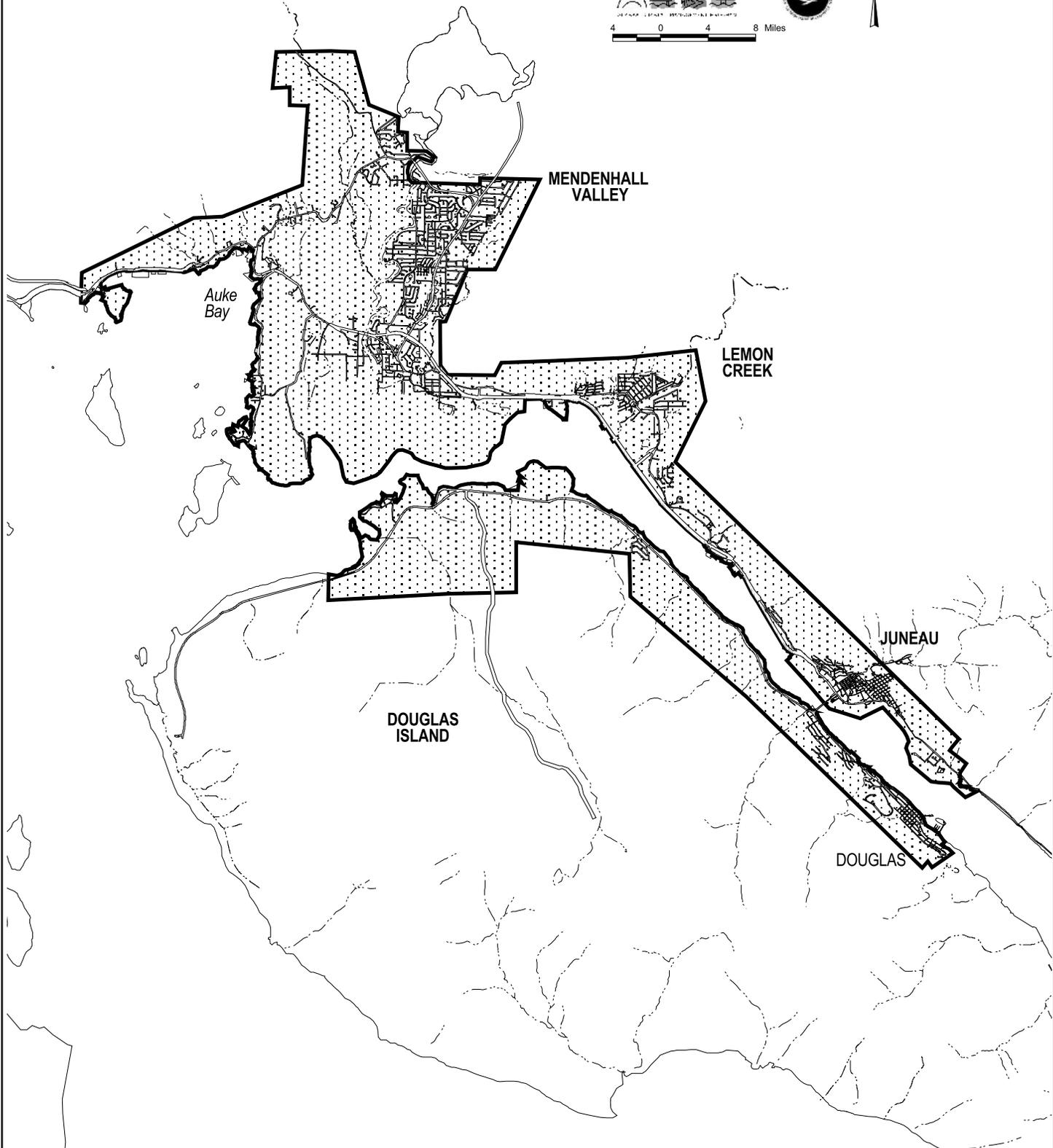
The land use inventory data was obtained by reviewing thousands of property tax files and a variety of City and Borough of Juneau land use maps. Land was considered developable if:

1. It is not a wetland;
2. The slope is less than 20 percent;
3. The value of its improvements is less than twice the value of the parcel;
4. A portion of the property is within 1,200 feet of an existing road; and
5. The land is not reserved in a special non-development category, such as city park or National Forest.

Juneau Coastal Management Plan December 2005 PRACTICABLE ALTERNATIVES INVENTORY STUDY AREA



4 0 4 8 Miles



The practicable alternatives inventory eliminated wetlands, steep slopes, inaccessible property, land dedicated to special restricted uses, and heavily developed land from the supply of developable land.

Most land use inventories consider any parcel with a structure to be a developed parcel because additional development usually requires subdivision of a parcel to make two or more smaller parcels. In order to subdivide a parcel, the subdivider has to provide improvements in accordance with the City and Borough of Juneau Land Use Code. As a result of the cost of improvements, and also of land owner preferences, not all parcels are subdivided down to their legal minimum lot size allowed in each zoning district. However, it is reasonable to expect that some land will be subdivided.

In this inventory it was assumed that all land not heavily developed would be subdivided. Any parcel whose structures were not assessed at a value at least twice as much as that of the land was considered developable. For over 11,000 parcels, the value of capital improvements was compared to land values.

For example, a parcel worth \$50,000 was not considered developed unless it had a building worth over \$100,000. This process exaggerated the amount of developable land because it assumed that every one of these lightly developed parcels would be subdivided and developed.

The ratio of developable vacant land to developed land in a zoning district was considered to indicate the relative supply of vacant land compared to demand for land. It was assumed that the future demand for various types of land use will be approximately equal to the current mix of land use, at least for the next five years.

For example, the inventory showed that Juneau had 219 acres of developed industrial land and 81 acres of developable industrial uplands. The ratio of developable to developed land is 0.37 (81 acres/219 acres), which means that if future residents use as much industrial land as current residents, Juneau can accommodate a 37 percent increase in population before it runs out of industrial land.

Land prices become prohibitively expensive long before the last bit of available land is used. Data taken from the Cost of Living Index published by the Research Association of the American Chamber of Commerce in October 1988, as the practicable alternatives inventory was being conducted, indicated that Juneau had the third highest average cost of living out of 260 participating urban areas across the United States. The Juneau cost of living exceeded those of Anchorage, Fairbanks, Ketchikan and Kodiak in Alaska. The cost of land is a significant component of the local cost of living. The anticipated increase in mining activity will only increase demand for the limited supply of developable land.

Once the demand/supply ratios for each zoning district was calculated, each land use zone was placed into one of five quintiles and given a score from 1 to 5. A score of 1 meant that the most upland practicable alternatives are available, and a score of 5 indicated that the least upland practicable alternatives are available for a particular zoning category.

The resulting distribution showed the relative abundance of practicable upland alternatives to wetlands development for each zoning district. A zone in the highest quintile (5) had the least amount of developable land in relation to land already developed. In these zones there are fewer practicable alternatives; hence, there is more pressure to develop wetlands. Figure 9 lists the results for the practicable alternatives land use inventory, completed on August 15, 1988.

For example, the Industrial zone, with a ratio of developable land to developed land of 37 percent, placed in the fourth quintile within the range of land demand/supply ratios (1% to 150%). All wetlands zoned Industrial received a practicable alternative score of 4, which indicates that there are relatively few upland industrial alternatives to development of wetlands in Industrial zones.

ZONING AND SUPPLY OF DEVELOPABLE LAND

The City and Borough of Juneau Planning Commission is responsible for making rezoning recommendations to the Assembly. If more land were available, the Planning Commission could alleviate wetlands development pressure by rezoning land into the zoning categories where there is the greatest shortage of developable uplands. However, there are not enough alternative sites that might be rezoned to alleviate development pressure in one zone without creating more pressure in another zone. Nor is there developable land that is not currently zoned.

Zoning is constrained by legislation and court rulings. When an applicant applies for a land use or building permit, the use must be allowed in the zone for the permit to be granted. It is not legal in the United States to grant a variance to allow a land use not permitted within a zoning district to locate in that zone. It is also illegal to zone a use in the middle of an incompatible zone (spot zone) and to grant a zone change with special conditions for a particular party (contract zone).

Once an area is zoned and permissible uses are established, zone changes are constrained to be compatible with reasonable investment backed expectations of all affected property owners. For all these reasons, zone changes are not a way to significantly increase practicable alternatives to wetlands development.

It is difficult to make additional land available to increase the area of any zoning district because existing uses preclude rezoning. An alternative solution for some communities is to zone undeveloped land. However, in Juneau, the undeveloped land is not available for development because it lacks basic urban utilities and access. Most undeveloped land could not be utilized without new access, such as an extension of North Douglas road or construction of a road into Bemers Bay.

FIGURE 9
LAND USE INVENTORY
August 15, 1988

| ZONE | 1 TOTAL ACRES | 2 DEVELOPED ACRES | VACANT ACRES | 3 DEVELOPABLE ACRES | 4 DEVELOPABLE DIVIDED BY DEVELOPED | QUINTILE RANK |
|------|------------------|----------------------|--------------|------------------------|---|---------------|
| D1 | 3,489 | 1,242 | 2,246 | 650 | .52 | 4 |
| D3 | 1,003 | 340 | 663 | 203 | .60 | 4 |
| D5 | 4,829 | 3,376 | 1,453 | 475 | .14 | 5 |
| O10 | 140 | 54 | 86 | 51 | .94 | 2 |
| D15 | 1,308 | 338 | 970 | 508 | 1.50 | 1 |
| D18 | 373 | 244 | 129 | 59 | .24 | 5 |
| MU | 155 | 108 | 46 | 4 | .04 | 5 |
| LC | 230 | 171 | 59 | 31 | .18 | 5 |
| GC | 240 | 154 | 86 | 45 | .29 | 5 |
| WC | 122 | 105 | 16 | 10 | .10 | 5 |
| WCR | 23 | 22 | 2 | 2 | .08 | 5 |
| WCI | 362 | 289 | 73 | 71 | .24 | 5 |
| I | 575 | 219 | 356 | 81 | .37 | 4 |
| RR | 18,672 | 2,565 | 16,107 | 1,024 | .40 | 4 |
| A | 667 | 655 | 12 | 6 | .01 | 5 |

Range = .01 to 1.50 = 1.49

Interval 1.49/5 = .30

Quintiles .01 - .31 = 5, .31 - .61 = 4, .61 - .91 = 3, .91 - 1.21 = 2, 1.21 - 1.51 = 1

¹From Central Sewage Treatment Plant to Indian Cove and from St. Annes (Linellen Heights) to Bay View (Entrance Pt.), inclusive.

²Parcels with building values more than half of the land values.

³Uplands, less than 20% slope, less developed land (parcels having land values less than twice building values), less avalanche zones, less parcels not having reasonable access (a boundary within 1,200 feet of an existing road), less reserved open space and greenbelts, less State and Federal land. Wetlands are not inventoried as developable land.

⁴Based on square foot raw data which is more precise than acreages.

Utility extensions and new access are not desirable from an environmental perspective because they create sprawl and subject additional wetlands to direct and indirect development pressure.

The only other direction available for growth is up steep slopes. Growth in Juneau has already been pushed onto hill sides. Development on steep slopes creates its own set of problems including catastrophic danger to residents and turbid runoff to anadromous streams and wetlands.

The Planning Commission wants to alleviate pressure on wetlands within heavily utilized zones by making appropriate rezones. The wetlands plan is to be updated every five years. At that time, the land use inventory will be recalculated to reflect any additions to the existing supply of developable land for any zone.

ASSIGNMENT OF DESIGNATED IMPORTANT HABITAT WETLAND MANAGEMENT CATEGORIES

The Designated Important Habitat Wetland Management units covered by the Juneau Wetlands Management Plan were assigned management categories (Category A, B, C, D and EP) through a two-step process:

1. "Consolidation" of data from the environmental analysis, public preference survey, and practicable alternatives analysis, and
2. Determination of final management categories through consultation with State and federal agencies and the public regarding the environmental values of particular wetlands.

CONSOLIDATION OF DATA

The City and Borough of Juneau followed a detailed quantitative process to consolidate the three component data sets (environment, public preference and practicable alternatives) for each Designated Important Wetland Habitat unit and assign an initial wetlands management category. Figure 10 illustrates the process used.

Each of the three component data sets was divided into quintiles. Designated Important Wetland Management Categories were assigned to a quintile based on the "Final Score" for each data set derived through the process shown on Figure 4. Each Designated Important Wetland Habitat unit received a score from 1 -5 for each of the three component data sets.

For the environmental component, the "converted functional value" (environmental score) represents the relative functional value of the wetland. An environmental score of 1 indicated a high functional value, whereas a score of 5 indicated a lower functional value.

For the public preference component, the score represents the relative desire for preservation or development. A score of 1 indicated a public preference for preservation of the wetland, whereas a score of 5 indicated a public preference for development.

For the practicable alternative component, the score represents the relative abundance of non-wetland developable land compared to developed lands within the zoning district. A score of 1 indicated an abundance of upland (non-wetland) development alternatives within the zoning district. A score of 5 indicated a scarcity of upland alternatives.

A two-step process was used to consolidate the three sets of data (now expressed in quintiles from 1 to 5), and assign an appropriate management classification (Category A, B, C or D) for each Designated Important Wetland Habitat unit (see Figure 10). First, the quintile ranking for the "converted functional value" (environmental score) was used to determine a range of two management categories that could be considered for the Designated Important Wetland Habitat unit. For example, a high environmental quintile ranking of 1 would indicate that the wetland should be assigned either a Category A or B classification. It would not be appropriate to place a highly valuable wetland in a lower management category.

Second, the public preference and practicable alternatives quintile rankings were used to select from the two management categories within the range. The public preference and practicable alternatives rankings were averaged to determine which management category was finally assigned. If the average was greater than three (3), then the less restrictive management category was chosen. If the average was less than three, then the more restrictive management category was chosen. An average of exactly three indicated that "best professional judgment" would need to be used to choose the final management category, based on consideration of individual environmental functions noted by Adamus and public comments regarding management preferences. When "best professional judgment" was used to assign a wetlands category, the rationale is provided in Appendix II-D.

DETERMINATION OF FINAL DESIGNATED IMPORTANT HABITAT WETLAND MANAGEMENT CATEGORIES

The City and Borough of Juneau determined the initial management categories for each Designated Important Wetland Habitat unit in the study area through the consolidation process described above. These initial management categories were published in the Concept Approved Draft of the Juneau Wetlands Management Plan, dated February 1991. This draft plan was then submitted to the State of Alaska and the federal government for incorporation into the Alaska Coastal Management Program. It was also sent to the Corps of Engineers with a request that the Corps issue a General Permit to reduce permit processing time for the Category C, D and EP wetlands.

As a result of the State and federal approval processes, many changes were made to the Designated Important Wetland Management Categories that were initially assigned in the Concept Approved Draft of the plan. These changes were made primarily to respond to concerns raised by State and federal agencies and the public regarding the environmental values of particular wetlands. The Corps of Engineers coordinated meetings and field visits involving the City and Borough of Juneau, State and federal agency personnel, and interested members of the public to discuss the particular sites and reach agreement on final the final management category for each disputed Designated Important Wetland Habitat unit.

FIGURE 10

**CONSOLIDATION OF DATA SETS AND
ASSIGNMENT OF INITIAL WETLAND MANAGEMENT CATEGORIES**

INPUT DATA QUINTILES

| QUINTILE RANKING | ADAMUS WET METHOD | PRACTICABLE ALTERNATIVES INVENTORY | PUBLIC PREFERENCE FOR MANAGEMENT |
|------------------|-------------------|------------------------------------|----------------------------------|
| 1 | High Value | Abundant Upland Alternatives | Preservation of Wetland |
| 2 | Medium High | | |
| 3 | Medium Value | Moderate Availability | |
| 4 | Medium Low | | |
| 5 | Low Value | Scarce Upland Alternatives | Development of Wetland |

CONSOLIDATION METHOD

1. The Adamus WET (environmental value) quintile ranking determined the range of wetland management categories that could be considered for the wetland unit:
 - High WET (1) = Category A or Category B management range
 - Medium High (2) = Category B or Category C
 - Medium (3) = Category B or Category C
 - Medium Low (4) = Category B or Category C
 - Low (5) = Category C or Category D

2. For each wetland unit, the quintile rankings for the practicable alternatives data and the public preferences data were averaged. If the resulting score was:
 - Greater than 3 = select the least restrictive management category of the two possible choices.
 - Less than 3 = select the most restrict management category of the two possible choices.
 - Equal to 3 = Use best professional judgement based on review of individual environmental functions and public comments in the public preference *Blue Book*.

The final designated important habitat wetland management categories included in this document (listed in Appendix II-D) were approved by the City and Borough of Juneau, State of Alaska, U.S. Department of Commerce and the U.S. Army Corps of Engineers. In all, 22 Designated Important Wetland Management Categories were changed from a lower management category (Category C, D or EP) to a higher management category (Category A or B) as a result of these discussions. In addition, 16 Designated Important Wetland Management Categories were changed from a higher management category (Category A or B) to a lower category (Category C or D) based on federal agency agreement that these Designated Important Wetland Management Categories were actually less environmentally valuable and were more suitable for fill. These Designated Important Wetland Management Categories are generally inaccessible and are not expected to receive development pressure.

CHAPTER III

WETLAND MANAGEMENT POLICIES

The policies of the *Revised Juneau Wetlands Management Plan*, that apply to all Designated Important Wetland Habitat Management Categories classified under this plan, are listed in this chapter. Development will be allowed in these wetlands only if the proposed project is in compliance with the enforceable policies of the plan. The process for applying these policies during permitting is described in detail in "Chapter IV, Implementation."

The policies of the Juneau Wetlands Management Plan have been approved by the City and Borough of Juneau, the State of Alaska, and the U.S. Department of Commerce. These policies have the force and effect of local, State and federal law to guide wetlands management in Juneau. The policies are part of the federally-approved Alaska Coastal Management Program, administered by the State of Alaska, Department of Natural Resources, Division of Coastal & Ocean Management. The policies have also been adopted into the CBJ Land Use Code, in section 49.70.1080.

APPLICATION OF THE WETLAND POLICIES

The City and Borough of Juneau has the authority to issue permits for development in Category C, D and EP wetlands under the terms of GPs 2000-01, -02 and -03 issued by the Corps of Engineers in May 2006 (Appendix II-F). Development activities on Category C, D and EP wetlands will be required to comply with the enforceable policies of this chapter. They will also be required to comply with the general and specific permit conditions listed in the General Permit. A copy of the conditions of the General Permit will be provided to the permit applicant as part of the permit application materials.

For Category A and B wetlands, the Corps of Engineers will continue to administer their individual permit process under Section 404 of the Clean Water Act. All developments permitted by the Corps must comply with the enforceable policies of this chapter. The CBJ will continue to participate in the Corps of Engineers permitting process through participation in the Alaska Coastal Management Program, coordinated by the State of Alaska, Division of Governmental Coordination.

Three administrative policy statements were also adopted by the CBJ and are included below. The CBJ will implement these administrative policies to farther protect the Category A, B and EP wetlands. These administrative polices have been incorporated into the CBJ Comprehensive Plan as city land management policy.

ADMINISTRATIVE POLICIES

WM(A) The CBJ seeks acquisition of Category A and EP wetlands.

WM(B) All Category A and B wetlands owned by the CBJ will be retained by the CBJ and managed for environmental protection.

WM(C) Category A wetlands will generally be kept in their natural condition.

INTENT OF THE WETLAND MANAGEMENT POLICIES

The policies of the Juneau Wetlands Management Plan will ensure that each Designated Important Wetland Habitat unit is managed in a manner that is appropriate to its classification (Category A, B, C, D or HP). The wetland classifications were assigned based on the Designated Important Wetland Habitat unit's environmental value, the availability of practicable upland alternatives to its use, and the public's preference for its management (see Chapter IV, Classification Methodology).

Generally, permit requirements for Category A and B wetlands will be more stringent and more difficult to satisfy than those for wetlands that are Category C and D. More substantial mitigation will be required for wetland impacts in Category A and B wetlands, than in Category C wetlands. Juneau is proposing development of a wetlands Mitigation Bank that could be used by applicants for permits in Category C wetlands to satisfy mitigation requirements that might be imposed (see Chapter IV, Implementation).

The policies of the plan further refine the classification of wetlands that are located either (1) along an anadromous fish stream or lake, or (2) along a developed roadway, suitable for residential development. The plan's "Anadromous Stream and Lake Corridor rule" provides greater protection for all wetlands within 50 feet of an anadromous fish stream or lake. This Anadromous Stream and Lake Corridor rule takes precedence over all other policies and provides heightened protection for anadromous stream habitat. The "Residential road corridor rule" allows wetlands within 100 feet of an existing roadway served with public water, that are already platted into small residential parcels, to be considered Category C. This rule is intended to ease permitting for single-family residences in areas already platted, served and zoned for such development. This policy will help to consolidate additional residential development in existing neighborhoods, along existing roadways.

The management categories affect how practicable alternatives to wetlands development are considered. For Category C, D and EP wetlands, the City and Borough of Juneau will presume that there is no less damaging practicable upland alternative to the proposed development. This presumption may allow development that is not water-dependent to occur in Category C, D and EP wetlands. The presumption is rebuttable and can be reversed by the weight of evidence presented during the permit review process administered by the Wetlands Review Board. For all other wetlands, the Corps of Engineers will continue to assume that there are practicable upland alternatives to all non-water-dependent development proposals, and applicants will continue to bear the responsibility of demonstrating that alternatives are not available on a permit by permit basis.

Finally, the policies of the plan require the application of "best management practices" for development in all wetland categories. These practices are intended to assure that the placement of fill in wetlands does not unduly degrade the values of the Designated Important Wetland Habitat unit or adjacent wetlands.

WETLAND MANAGEMENT POLICIES

ENFORCEABLE POLICIES

WM(1) All individual wetlands designated as Important Habitat will be managed in accordance with the wetland management categories presented in the charts and maps in Appendix II-D and the Anadromous Stream and Lake Corridor and Residential Road Corridor Designation Rules described in policies 5 and 6.

WM(2) The Anadromous Stream and Lake Corridor and Residential Road Corridor Designation rules take precedence over the underlying Important Habitat Wetland Management Designations.

WM(3) The Anadromous Stream and Lake Corridor Designation rules take precedence over the Residential Road Corridor Designation rules.

WM(4) Category A, B, C, D and EP wetlands will be managed according to the following policies:

- A. Category A wetlands may be developed if there is no net loss of individual functional values in the Designated Important Wetland Habitat unit. One environmental function may not be substituted for another.
- B. Category B wetlands may be developed if there is no net loss of aggregate functional values in the Designated Important Wetland Habitat unit. One environmental function may not be substituted for another. However, to the extent practicable, individual environmental functions that are rated high or medium high in Appendix II-F will be retained within the Designated Important Wetland Habitat unit.
- C. Category C wetlands may be developed if there is no net loss of aggregate functional values in the roaded area. To the extent practicable, individual environmental functions that are rated high or medium high will be retained within the designated area.
- D. Category D wetlands shall be developed using best management practices as contained in enforceable policy 7. Project design and scheduling must minimize adverse impacts.
- E. Enhancement potential (Category EP) wetlands are wetlands that have potential for environmental enhancement. These are wetlands that have been created or degraded by development. Publicly owned EP wetlands may only be used for enhancement projects.

WM(5) All anadromous streams and lakes in Designated Important Habitat Wetland Management categories shown with an "(S)" in the Designated Important Habitat Maps shall have an Anadromous Stream and Lake Corridor Designation measured 50 feet from the Ordinary High Water Mark. This 50-foot Corridor shall be designated and managed as wetlands Category A. The Corridor extends upstream to the limit of anadromous fish use.

WM(6) Residential parcels with wetlands within the Residential Road Corridor Designation, shown with an “(R)” on the Important Habitat Designation maps, shall have a temporary 100-foot wide Category C designation corridor measured from the road frontage right-of-way to promote development near the road. The Residential Road Corridor Designation rule allows residential development on certain Category A or B wetlands under the Category C wetland policies. Wetland permits within the Residential Road Corridor shall be processed through the U.S. Army Corps of Engineers. The rule applies only to residential parcels where public water is already provided.

WM(7) Best management practices are required for development on any wetland. The following conditions will be prescribed for all wetland developments.

- A. Existing wetlands vegetation shall be stripped in mats and repositioned over regraded soil.
- B. The amount of fill shall be restricted to the minimum amount necessary to achieve stated project purposes.
- C. Hydrology surrounding the discharge site shall be maintained with the use of culverts, if necessary. Activities shall not adversely impact adjacent wetlands by causing ponding, drainage, siltation or inadvertent fill.
- D. Erosion at the construction site shall be controlled through revegetation and other appropriate means. Exposed soils shall be revegetated within one year.
- E. The Wetland Permit shall expire 18 months after the effective date of the permit if no Building Permit has been issued and substantial construction progress has not been made in accordance with the plans for which the development permit was authorized.

WM(8) For each wetland unit, individual functions which have potential for high values as presented in Appendix II-E will be considered during review of a project. Any new information regarding the value of individual wetland functions will be evaluated and considered during the review of a project. Individual wetland functions may either be demonstrated to be less, or more, important than the data in Appendix II-E indicate. As wetlands are developed, some functions may become scarce, increase in value, and require special consideration during a project review.

WM(9) The following mitigation policies will apply to a development proposal that would be located in Category A or B wetlands and that requires municipal, State or federal permits:

- A. Avoid damage to the functional values by avoiding or relocating the development proposal.
- B. Where loss or damage to the functional values cannot be avoided, minimize loss or damage by limiting the degree or magnitude of the development and the actions associated with conducting the development.
- C. Where the loss of functional values cannot be minimized, restore or rehabilitate the wetland to its pre-disturbance condition, to the extent practicable.

- D. Where the loss of functional values at the development site is substantial and irreversible and cannot be avoided, minimized, restored, or rehabilitated, mitigate for the loss as follows:
- (i) For Category A wetlands, the mitigation actions must be in-kind and must be on-site, located as close as possible to the development site(s).
 - (ii) For Category B wetlands, the mitigation actions must be either in-kind or out-of-kind provided the net aggregate values of the Designated Important Wetland Habitat unit are maintained. Mitigation actions must occur on-site, located as close as possible to the development site(s).

WM(10) The following mitigation policies will apply to a development proposal that would be located in Category C or D wetlands and that requires municipal, State or federal permits:

- A. Based on the extensive analysis of land use alternatives conducted in the land use inventory for the JWMP, the CBJ will presume that there is no practicable alternative for developments proposed on Category C and D wetlands. This presumption is rebuttable for individual projects, which means that the Wetlands Review Board can still conclude that there is a practicable alternative based on its review of project-specific evidence during the permit review process.
- B. Where the development proposal is otherwise lawful and entitled to a wetlands development permit, minimize the loss of functional values by limiting the degree or magnitude of the development and the actions associated with conducting the development.
- C. Where the wetland loss cannot be reduced by minimizing the development, mitigate by restoring or rehabilitating the wetland to its pre-disturbance condition, to the extent practicable.
- D. Where the loss cannot be reduced by minimization and restoration/rehabilitation, mitigate by compensating for the loss as follows:
 - (i) For Category C wetlands, the form of mitigation required will be selected on the basis of: (1) probability of success, (2) potential gain in functional values, (3) extent to which high and medium high functional values are retained, and (4) cost effectiveness. In general, the order of preference for mitigation is:
 - (a) on-site and in-kind;
 - (b) on-site and out-of-kind;
 - (c) off-site and in-kind; and
 - (d) off-site and out-of-kind.

For small-scale developments (five acres or less), the CBJ mitigation bank may be used to meet this requirement.

- (ii) For Category D wetlands, off-site compensatory mitigation is not required provided the minimization and restoration steps above in 13(B) and (C) are followed and best management practices as contained in enforceable policy 7 are employed.

WM(11) Some Designated Important Wetland Management Categories may receive a Category B designation for a portion of the unit and a Category C for the rest of the unit. If on-site mitigation is required as compensation for development within the Category B area of the Designated Important Wetland Habitat unit under policy 9(D)(ii), the mitigation project should occur within the Category B wetland area unless: (1) a suitable site or mitigation opportunity is not available within the Category B wetland area, or (2) the same or greater environmental benefit could be gained with less expenditure by conducting a mitigation project with the Category C wetland area.

Authority: 11 AAC 112.300(9) 11 AAC 114.250(h) 11 AAC 114.400
Maps: Volume II, Appendix II-C

CHAPTER IV IMPLEMENTATION

The Juneau Wetlands Management Plan will be implemented primarily through permits required for development on wetlands. Permits will be issued by the City and Borough of Juneau or the Corps of Engineers for development projects on wetlands only when those projects are in compliance with the policies of this plan ("Chapter III, Wetland Management Policies"). Juneau will also take other, non-regulatory actions, to implement the wetlands plan, including implementing a wetlands mitigation strategy, taking action to encourage protection of high value wetlands on private property, and retaining ownership of high value wetlands currently owned by the City and Borough of Juneau.

The Juneau Wetlands Management Plan was originally approved by the City and Borough of Juneau, the former Alaska Coastal Policy Council, and the U.S. Department of Commerce, Office of Ocean and Coastal Resource Management as a component of the Alaska Coastal Management Program. It was also adopted into the City and Borough of Juneau Land Use Code (Title 49, Chapter 70). Since November 23, 1993, the regulatory provisions of the plan have had the full effect of local, State and federal law.

On June 30, 1995, the Corps of Engineers also issued General Permit 92-1, which is an important implementation tool for the Juneau Wetlands Management Plan. The General Permit gives the City and Borough of Juneau authority to issue local wetlands permits for placement of dredge and fill material in the Category C, D and EP wetlands designated in the wetlands plan. The General Permit also includes general and specific permit conditions that will apply to all developments covered under the permit.

On July 24, 2000, The Corps of Engineers re-issued a general permit for local wetlands permits. This time issuing four related General Permits 2000-01, -02, -03 and -04. On May 24, 2006, three of the General Permits (GP) were renewed: GP 2000-01, -02, -03. GP 2000-04 was not renewed due to lack of use. Copies of both the original General Permit 92-1 and the newer General Permits are included in Appendix II-F.

The Juneau Wetlands Management Plan was subsequently revised to comply with changes to state laws. The revised regulatory provisions of the plan became effective in the Spring of 2008.

IMPLEMENTING ORGANIZATIONS

The wetlands plan is implemented by the City and Borough of Juneau in its decisions regarding local wetlands permits, and in other actions it takes in managing public wetland resources. The primary point of contact for CBJ implementation is: Director, Community Development Department, City and Borough of Juneau, 155 South Seward Street, Juneau, AK 99801, Telephone: (907)586-0715, FAX: (907)586-3365.

The City and Borough of Juneau established a citizens Wetlands Review Board in 1992. By ordinance, the Board has authority to: (1) serve as the decision-making body for the issuance of wetlands development permits in Category C and D wetlands, and enhancement project permits in Category EP wetlands; (2) administer the CBJ Wetlands Mitigation Bank and develop and implement a long-term mitigation strategy for Juneau wetlands; and (3) prepare an annual report on the status of the Mitigation Bank. The Board also functions as an advisory body to the Planning Commission and the Director of the

Community Development Department on other wetlands issues, such as CBJ comments on wetland permit applications being considered by the Corps for wetlands not covered by the General Permit; the protection of stream side riparian areas; and the conduct of CBJ, State and federal projects that affect wetlands and streams.

The Board is composed of seven members of the public at large and two representatives of the CBJ Planning Commission. Board members are appointed by the Assembly. When making appointments, the Assembly is required to consider obtaining the "broadest possibility representation from those technical fields with knowledge of the values, functions and uses of wetlands, such as fish or wildlife biology, geology, hydrology, land use planning and engineering." (CBJ 49.70.1010). Appointments are for three year terms. The Board meets monthly to hear and decide wetland permit applications. The presence of five members constitutes a quorum and any action of the Board requires five or more affirmative votes to be approved.

The Juneau Wetlands Management Plan is also implemented by the Corps of Engineers. For Category A and B wetlands, and for any wetlands in Juneau which are not classified under the wetlands plan, an individual or nationwide permit from the Corps of Engineers is required. The Corps will process these permits through their normal regulatory procedure. A permit can be issued by the Corps for development in a Category A or B wetland only if it is determined that the project is "consistent with" the enforceable policies of the Juneau wetlands plan. The Corps permit process invites comment from State and federal resource agencies, the CBJ and the public.

WETLAND DELINEATION AND BOUNDARY DETERMINATIONS

The Corps of Engineers has the responsibility and authority to delineate wetlands that are subject to regulation under the Clean Water Act. The Corps delineates wetlands in accordance with the federal definition of what constitutes a "wetland" under the Clean Water Act. Corps personnel in Juneau are responsible for visiting local properties and delineating any wetlands on the site. The Corps has also used aerial photography to locate wetlands in Juneau. Wetland mapping done by the Corps in 1986 from aerial photographs was used as the base map for the Juneau Wetlands Management Plan. However, more detailed field visits by the Corps continually result in revisions to these maps and new wetlands have been delineated since the date of that mapping. Property owners should contact the Corps of Engineers to determine whether they have wetlands on their property.

The Juneau Wetlands Management Plan provides a procedure for applicants to obtain boundary determinations for wetlands covered under the Plan. The Category A, B, C, D and EP wetlands of the CBJ are mapped in the Juneau Wetlands Management Plan, Wetlands Map Atlas (dated May 1994). These maps have been reproduced at a scale suitable for printing in this document and can be found in Appendix II-C. The determination as to whether a land parcel is within a Designated Important Wetland Habitat Management Category (C, D, or EP) and is, therefore, subject to the jurisdiction of the CBJ Wetlands Review Board, is made by the CBJ's Community Development Department. The Department may request additional information from the permit applicant to aid in the determination. The Department will provide a copy of its determination to the applicant and the Corps of Engineers. The Department's determination will be subject to review, modification or revocation by the Corps of Engineers. The Department will proceed with the local wetlands permit process for wetlands classified as Designated Important Wetland Habitat Management Categories C, D, or EP unless and until it receives notice from the Corps of Engineers that the Department's determination was in error.

PERMITS FOR DEVELOPMENT IN WETLANDS

The Juneau Wetlands Management Plan and General Permits 2000-01, -02, and -03 give the CBJ Wetlands Review Board the authority to issue wetlands permits for disposal of dredge and fill material in Designated Important Habitat wetlands classified as Category C, D or EP under the Juneau plan. The Board must follow the procedures and policies listed in this plan and the general and special conditions listed in the General Permit (Appendix II-F).

The Corps of Engineers will continue to issue individual or nationwide permits for disposal of dredge and fill material in Designated Important Habitat Category A and B wetlands, and in all other wetlands not classified under the Juneau wetlands plan. The Corps may also issue nationwide permits for activities on Designated Important Habitat Category C, D or EP wetlands that qualify for that type of permit.

The Corps of Engineers considers the following criteria in evaluating individual permit applications for the discharge of dredged or fill material, and in determining whether a General Permit should be issued for discharges in specific wetland areas. These criteria have been addressed in advance for discharge of dredged or fill material on Designated Important Habitat Category C and D wetlands through: (1) preparation of the Juneau Wetlands Management Plan, including the designation of wetland management categories C and D; (2) the future review of individual disposal of dredged or fill material projects on Designated Important Habitat Category C and D wetlands for compliance with the enforceable policies of this plan; and (3) implementation of the Mitigation Strategy and Mitigation Bank discussed later in this chapter. The Corps of Engineers' criteria are as follows:¹⁸

1. The benefits which reasonably may be expected to accrue from the proposal are balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are determined by the general balancing process. All factors which may be relevant to the proposal must be considered, including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.
2. The relative extent of the public and private need for the proposed structure or work.
3. Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work.
4. The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.
5. The specific weight of each factor is determined by its importance and relevance to the particular proposal. Accordingly, how important a factor is and how much consideration it deserves will vary with each proposal. A specific factor may be given great weight on one proposal while it may not be present or as important on another. Full consideration and

¹⁸ CFR 320.4, Federal Register Vol. 51, No. 219.

appropriate weight will be given to all comments, including those of federal, State and local agencies and other experts on matters within their expertise.

LOCAL WETLANDS PERMITS

The CBJ Wetlands Review Board will use the following procedures for processing applications for local wetlands permits. These procedures are found in the CBJ Land Use Code at 49.70.1060-1075.

Jurisdiction of Local Wetlands Permits

A local wetlands permit can be issued by the Wetlands Review Board for development activities requiring placement of dredged or fill material on Designated Important Habitat C and D wetlands, and enhancement activities on Designated Important Habitat Category EP wetlands, with the following exceptions:

1. **Nationwide Permits:** If the activity proposed by the applicant is covered by a nationwide permit issued by the Corps of Engineers, no local wetlands permit will be required provided the activity is conducted in compliance with the requirements of the nationwide permit.
2. **Excluded Activities:** The following activities cannot be permitted under a wetlands permit issued by the CBJ Wetlands Review Board: placement of dredged or fill material in waters of the United States for purposes of heavy industry, dry cleaning operations, hazardous waste disposal, battery transfer yards, commercial auto repair garages, and fuel storage sites. These activities, in order to be undertaken, must be authorized by an individual permit issued by the Corps of Engineers.

Local Wetlands Permit Review Procedure

1. **Submittal of Application:** An application for a wetlands permit must be filed with the CBJ Community Development Department on the form provided by the Department, and must include the required application fee. The permit application form requires a description of the project location, the proposed activity, and the purpose and need for the project. The project description must include quantities of fill material, acreage of disturbed surface area, measures that the applicant proposes to take to comply with the enforceable policies of the Juneau Wetlands Management Plan, source of fill and any off-site disposal locations. The application must include a site plan and narrative description.
2. **Director Action:** Upon a determination by the Director of the Community Development Department that the permit application is complete, the application will be scheduled for Wetlands Review Board action at the next regular meeting.
3. **Public and Agency Notice:** Public notice will be provided by the Community Development Department, including notice in the newspaper and direct mail notification to neighboring property owners within 300 feet. The applicant will be required to post on-site a large red public notice sign, prepared by the Department, seven days prior to the Board hearing. Copies of the permit application will be distributed by the Department to the State and federal resource agencies (including the Corps of Engineers) and members of the public who request the opportunity to review and comment on wetlands permit applications.

4. **Staff Report:** The Department's report to the Wetlands Review Board presented at the meeting will include the following:
 - a. Information regarding the project, the management designation for the Important Wetland Habitat unit under the Juneau Wetlands Management Plan (Category C, D or EP), the applicability of the Anadromous Stream and Lake Corridor Designation Rule and the Residential Road Corridor Designation Rule to the Designated Important Wetland Management Category, the applicability of the policies of the Juneau Coastal Management Program, and the applicability of the general and specific conditions listed in General Permits 2000-01, -02, and -03. (Appendix II-F);
 - b. An assessment of how the project meets the enforceable policies of the Juneau Wetlands Management Plan, including:
 - (i) Any new information regarding the wetland functions listed in the Juneau Wetlands Management Plan and practicable alternatives to the proposed wetlands development,
 - (ii) For Category C wetlands, recommendations for maintaining high or medium high individual wetland functional values either on-site or off-site, to the extent feasible and prudent,
 - (iii) Recommended project modifications or best management practices to avoid or minimize project impacts on wetland acreage and values, and
 - (iv) Recommended restoration, rehabilitation or compensation as required under the enforceable policies of the plan, including any proposed use of the Mitigation Bank for compensation;
 - c. An estimate of cumulative changes in both function and acreage of the Juneau wetlands base as a result of the project and any related mitigation. The estimate of cumulative changes will be primarily based on the information regarding individual wetlands functions included in Appendix II-E of this plan; and
 - d. A recommendation to the Wetlands Review Board for approval of the project with or without specified conditions, or a recommendation for denial. A recommendation for permit denial may be based on available practicable alternatives, or inability to mitigate against loss of wetland functions and values, as required under the enforceable policies of the plan.
5. **Public Hearing:** A public hearing will be advertised and held at the Wetlands Review Board meeting at which action on the permit application is scheduled. Any one is welcome to present written or oral testimony regarding the project.
6. **Wetlands Review Board Action:** The Board will evaluate the application for compliance with the enforceable policies of the plan and the conditions of General Permits 2000-01, -02, and -03. The Board will presume that there is no less damaging practicable alternative site for the proposed development. This presumption will be evaluated in the staff report, and may be reversed by the Board on consideration of the information presented during the permit review process.

The Board may grant a wetlands permit as described in the original permit application or with conditions necessary for compliance with the enforceable policies of the plan. The Board may require that the applicant submit revised plans, narratives and other information which reflect the conditions applied by the Board prior to issuance of the permit. The Board will make a final decision on a permit no later than sixty days after the Director determines that the application is complete. The Director shall issue or deny a wetlands permit in accordance with Board action on the application.

All Board meetings and public hearings will be recorded and minutes will be taken by a secretary. Minutes and recordings are available to the public.

Actions of the Board are appealable to the CBJ Assembly under the appeal provisions of the CBJ City Code (CBJ 01.50).

7. Temporary Emergency Permit: In cases where there is an imminent threat to life or severe loss of property, the Director may issue a temporary emergency wetlands permit without action of the Board. The permit may include conditions necessary to ensure compliance with the enforceable policies of the plan. The permit shall be in effect only until the next regular meeting of the Wetlands Review Board, when formal action on the permit application can be taken.
8. Permit Expiration and Extension: The maximum duration of a local wetlands permit is three years. The permit will expire within 18 months of issuance if no associated building permit, right-of-way permit, or similar permit for construction has been issued and substantial construction progress made, unless otherwise specified in the wetlands permit or unless the permit is extended by the Board. The permittee shall restore the site to pre-project conditions upon expiration of a wetlands permit.

The Board may extend a wetlands permit. The applicant must submit a request for extension at least thirty days before the expiration of the permit. A new application fee will be assessed for a permit extension. The Board will hold a public hearing to consider whether the permit should be extended. At the hearing, the burden of proof for the justification for a permit extension shall rest with the applicant. The Board may grant no more than one extension, not to exceed 18 months, and may not change the original permit conditions. If the Board finds that the applicant's burden has not been met, or that the conditions contained in the permit should be changed, or both, the Board will deny the request to extend the permit. The applicant can then reapply for a new wetlands permit.

CORPS OF ENGINEERS PERMITS

The Corps of Engineers has retained the jurisdiction to decide whether to issue permits for disposal of dredged or fill material in Designated Important Wetland Habitat Management units classified as Category A and B under the Juneau Wetlands Management Plan, and in all wetlands not classified under the plan. The Corps will follow the requirements of the Clean Water Act and its implementing regulations and procedures in reaching permit decisions.

Before the Corps of Engineers issues a permit for a development project in a Designated Important Wetland Habitat Management Category A or B, it must ensure that the project is "consistent with" the enforceable policies of the Juneau Wetlands Management Plan and the Juneau Coastal Management Program. This "consistency requirement" exists because the Juneau plan has been approved by the U.S. Department of Commerce under the federal Coastal Zone Management Act. As a federal agency, the

Corps is required to issue permits only if they are consistent with all plans approved under that Act, or can be made consistent if the project is modified. The Corps may require the applicant to comply with permit conditions to make the project consistent with the plan's policies.

The City and Borough of Juneau will comment on all applications for Corps of Engineers permits through the review process coordinated by the State Department of Natural Resources, Office of Project Management and Permitting under the Alaska Coastal Management Program (11 AAC 110). The CBJ Community Development Department will provide comments regarding whether the proposed project is consistent with, or can be made consistent with (through permit conditions), the enforceable policies of the Juneau Wetlands Management Plan and Juneau Coastal Management Program. The Wetlands Review Board will review and provide advisory comments to the Director of the Community Development Department regarding the CBJ's comments on all Corps of Engineers permit applications for development on wetlands. Under State regulations (11 AAC 110.255), under certain circumstances, the CBJ will be given "due deference" by the agency coordinating the consistency review when it makes its consistency determination. Due deference is a concept and practice within the consistency review process that affords the commenting review participants the opportunity to include, review, or refine the alternative measures or consistency concurrence if they have expertise in the resource or the responsibility for managing the resource. The CBJ and resource agencies are provided deference in interpretation of policies and standards in their area of expertise or area of responsibility. Then the CBJ may be afforded due deference if the CBJ can demonstrate expertise in the field.

If the coordinating agency rejects the comments of the CBJ or any alternative measures that the CBJ might seek to have imposed on the application in connection with a consistency determination, the coordinating agency must provide a brief written explanation stating the reasons for rejecting or modifying the alternative measure.

MITIGATION STRATEGY

The Wetlands Review Board will develop and implement a long-term, comprehensive wetlands mitigation strategy for Juneau wetlands, in consultation with State and federal agencies. The goal of the strategy is to create the greatest environmental benefit for each expenditure for a mitigation project. The strategy will include:

1. Restoration and enhancement objectives with consideration to historical losses of wetland acreage and functional values;
2. Suitable mitigation sites based on the degree and type of wetlands degradation at each site and opportunities for obtaining the site for the mitigation bank;
3. Appropriate and feasible mitigation projects for each identified site;
4. Individual functional values that can be recreated at each site with a high probability of success; and
5. Restoration and enhancement opportunities outside the proposed Mitigation Bank sites.

To date, the Wetlands Review Board has taken the following actions regarding the Mitigation Strategy. The CBJ contracted with the Alaska Department of Fish and Game (ADFG) to prepare a recommendation of potential mitigation projects and sites in Juneau. The ADFG evaluated each Designated Important

Wetland Habitat unit included in the Juneau Wetlands Management Plan and recommended possible mitigation projects for the Board's consideration.

On November 3, 1993, the Board adopted a general mitigation strategy that established the three broad categories of Protection, Education, and Restoration/Creation Projects as an outline for the CBJ's approach to wetlands mitigation.

Protection: includes land acquisition, land trades, and retention of high value wetlands in public ownership; designations of greenbelts and open space; vacating unbuilt plats in wetland areas; improving enforcement of existing and newly-issued wetlands permits; requiring the application of Best Management Practices (pollution prevention/abatement); additional inventory and data collection for Juneau wetlands to expand the coverage of the wetlands plan; and participation in cooperative watershed management and restoration plans.

Education: includes providing public and student education on wetland types, values and functions; and participation in cooperative education projects.

Restoration/Creation Projects: includes gathering baseline information and analysis of problem wetland areas; restoration of lost or impaired functions at existing wetland sites; making changes from one wetland type to another (e.g., open water to emergent vegetation, or reverse); creation of particular habitat attributes (e.g., spawning/rearing areas; waterfowl staging ponds) within newly-created or historic wetland areas.

The Board also decided that the CBJ should focus on a single watershed for protection, restoration and education efforts, to the extent feasible. However, the Board also opted to retain the flexibility to take advantage of other opportunities and address other situations outside of that system when it is in the public interest to do so. On January 20, 1994, the Board decided to focus its initial mitigation efforts on the Duck Creek drainage, since that watershed is already the subject of an intensive interagency stream restoration program.

In 1999, CBJ Community Development Department, funded through a grant from US Environmental Protection Agency, hired Wildlands, Inc. to assist in the development of a mitigation program for the Juneau area. The Community Development Department with the assistance of Wildlands convened a number of meetings with interested stakeholders and regulatory staff to review the status of mitigation efforts and receive input on preferred methods to address wetland mitigation issues. The results of that effort are published in "Final Draft Preferred Wetlands Mitigation Program Alternative, City and Borough of Juneau, March 1, 2000."

MITIGATION BANK

The City and Borough of Juneau will establish a Wetlands Mitigation Bank that will be administered by the Wetlands Review Board, with staff assistance from the Community Development Department. The Mitigation Bank will manage wetland sites that can be protected or enhanced. The managed sites will be used primarily to compensate for adverse impacts on Category C wetlands.

A detailed ordinance, outlining the procedures for operation of the Bank, will be approved by the CBJ Assembly and adopted into the CBJ Land Use Code before the Bank begins operation. State and federal resource agencies, and interested members of the public, will be invited to participate in the development

and review of the ordinance establishing Bank procedures. As of February 2008, efforts to establish a mitigation bank are ongoing.

BASIC CONCEPTS OF MITIGATION BANKING

The purposes of the Wetlands Mitigation Bank are to:

1. Promote, in concert with federal and State programs as well as interested parties, the maintenance and conservation of wetlands;
2. Improve cooperative efforts among private, non-profit and public entities for the management and protection of wetlands;
3. Offset losses of wetlands values caused by activities that otherwise comply with local, State and federal law in order to restore, enhance or create wetlands values and functions;
4. Maintain and encourage a predictable, efficient regulatory framework for environmentally acceptable development; and,
5. Provide an option for permit applicants directed to accomplish off-site mitigation under the terms of a CBJ wetlands permit for Category C wetlands.

The Mitigation Bank will operate like a "bank" in that it will issue credit and accept cash payments. The CBJ will use the Bank's initial capital to conduct wetland mitigation projects, thereby improving wetland values at the site of the enhancement project and accruing "wetland mitigation credits." Bank funds could be used to accomplish a variety of projects that will improve wetland and stream habitat values, such as replacing culverts that are currently blocking fish passage and reducing important fish habitat in Juneau's stream, or reestablishing wetlands hydrology and vegetation at a site that has been previously filled or disturbed.

Once the Bank accrues a balance of "wetland mitigation credits," private developers will be able to conveniently purchase credits from the Bank to offset their project's wetland impacts, rather than having to undertake complex wetland mitigation projects on their own. For example, a permit applicant in Category C wetlands might be directed to conduct an off-site wetlands mitigation project to compensate for wetland losses at their development site. In lieu of conducting this mitigation project, the developer could choose to purchase credits from the Mitigation Bank.

The cost of the purchase of mitigation credits will be determined by assessing the CBJ's costs for conducting wetlands enhancement projects and accruing initial credits to the Bank. The CBJ will calculate its costs in creating additional habitat benefits through wetlands restoration, enhancement or creation. The cost of each credit gained through the mitigation project will then be calculated, ensuring that the CBJ recovers its project costs. The cash payments that a developer pays to the Bank will, in turn, be used by the CBJ to conduct additional mitigation projects and recapitalize the Bank's credits.

MITIGATION BANK ADMINISTRATIVE POLICIES

MB(A) A Mitigation Bank will be established to provide bank credit to satisfy mitigation requirements for certain developments in Category C wetlands. The Mitigation Bank will operate under the following conditions:

- (1) Credits are not available to a permit applicant until the bank completes the wetlands protection, enhancement or creation project and the Wetlands Review Board, in consultation with the agency working group, certifies that the wetlands functions and values have been or will be established.
- (2) Mitigation Bank credits cannot be used for any permit action where the wetlands area to be adversely affected by a dredge or fill activity exceeds five acres. This requirement prevents bank credits from being exhausted by a single large development.
- (3) A permit applicant will be required to perform mitigation through individual actions rather than through the bank for fill activities that exceed five acres. The bank is designed to facilitate mitigation for small-scale developments that might otherwise cause cumulative incremental damage to overall wetlands values.
- (4) To the extent practicable, projects using least damaging technologies will be given priority in using Mitigation Bank credits.
- (5) The calculation of cost charged to a project applicant for each Mitigation Bank credit will be based on all costs and expenses incurred or expected to be incurred by the bank in establishing and maintaining the bank. This includes, but is not limited to, applicable land costs and project monitoring.
- (6) The Mitigation Bank should focus on proven mitigation techniques. Restoration and enhancement is preferred over wetlands creation. Protection of existing wetlands (such as through public purchase) is the lowest priority for the bank and should only be considered when development and the loss of wetlands functions and their values are imminent.
- (7) To the extent practicable, mitigation shall occur in the same watershed as the development for which it is compensation.

SELECTION OF MITIGATION BANK PROJECTS

The Wetlands Review Board will recommend areas where wetlands can be protected, restored, enhanced or created for the Mitigation Bank. The recommendations will be forwarded to the CBJ Assembly (Lands Committee) which will approve a priority list of mitigation bank projects.

A successful Mitigation Bank will create the most amount of environmental benefit for any given expenditure. The CBJ Wetlands Review Board will consult with State and federal natural resource and regulatory agencies, affected organizations, and other interested parties in selecting projects for the Bank. State and federal resource agencies, and interested members of the public, will be invited to participate in a Mitigation Bank working group.

In consultation with the agency working group, the Wetlands Review Board will:

1. Review opportunities for inclusion of appropriate wetlands in the Bank; and
2. Develop and recommend a wetlands priority plan for inclusion in the Bank.

Creation or enhancement projects will only be funded after specific plans are reviewed and approved by the CBJ. The CBJ will consult with the agency working group.

It is anticipated that most of the Bank's activity will consist of wetlands protection, restoration, and enhancement, although some creation may be possible. There is some preliminary evidence that natural conditions in Juneau are more favorable to creation than in other areas of the country. For example, Designated Important Wetland Management unit DW17 is a high value wetland that was artificially created by dredging. However, since wetlands creation is less certain and requires long term monitoring, any creation will most likely take place contiguous to an existing wetland and will be accomplished in close consultation with resource agencies.

BANK OPERATION

The Wetlands Review Board will develop detailed Bank operating procedures that will be approved for adoption into the CBJ Land Use Code by the Planning Commission and the Assembly. The following criteria will be used to create these operating procedures for the site selection process, operation, and evaluation of the Mitigation Bank:

1. Historic wetlands trends, including the estimated rate of current and future losses of the respective types of wetlands (these data are published in the Appendix to the Functions and Values report);
2. Contributions of wetlands to:
 - a. Wildlife, migratory birds and resident species;
 - b. Commercial and sport fisheries;
 - c. Surface and ground water quality and quantity, and flood moderation;
 - d. Outdoor recreation and environmental education; and
 - e. Scientific and research values;
3. Economic needs;
4. Value of wetlands functions attributed to the wetlands most likely to be degraded;
5. Potential bank sites suitable for restoration, creation, and functional enhancement projects including those wetlands not evaluated in the Adamus study;
6. State-of-the-art mitigation techniques appropriate for each potential bank site;
7. Identified problems associated with restoration, creation, and enhancement projects that have been implemented in similar wetland environments elsewhere; and

8. Monitoring and evaluation strategies for determining the effectiveness of creation, restoration, and enhancement projects in achieving stipulated objectives. Mitigation Bank funds will be managed by establishing a revolving "Capital Improvement Project" (CIP) fund account. All money received by the Bank will be paid into the CBJ Treasury, credited to the CIP account and appropriated only to the Bank. The Bank will follow strict accounting procedures.

Bank funds can be used for the following purposes:

1. To acquire land suitable for use as Mitigation Bank projects;
2. To pay the cost of restoring, enhancing or creating wetlands areas; and,
3. To pay the cost of administrative, scientific research, and monitoring expenses.

The Bank can also accept land donations. Any land donation accepted by the Bank will be valued at its fair market value as determined by an independent appraisal.

REPORT ON BANK OPERATION

The Wetlands Review Board will be responsible for preparing an annual report regarding the Mitigation Bank. The report will be presented to the City and Borough of Juneau Assembly and the Corps of Engineers, and will:

1. Evaluate the wetlands functions and values created;
2. Compare the mitigated functions and values with the functions and values that were anticipated; and,
3. Audit the financial status of the account including:
 - a. Credits sold for each specific permit activity,
 - b. Total credits sold during the year,
 - c. Credits accrued during the year through mitigation projects,
 - d. Credits balance in the account, and
 - e. Status of pending activities.
4. Estimate the cumulative changes in wetland functions and acreage in the Juneau area as a result of development projects and related mitigation.

ENFORCEMENT

Monitoring the compliance of developers with local wetlands permit applications is critical to ensuring that the Juneau Wetlands Management Plan is effective. Monitoring of permit compliance will be done by the staff of the Community Development Department. Staff will report regularly to the Wetlands Review Board on monitoring and enforcement activities associated with permits issued by the Board.

If violations of permit conditions are noted, staff will follow the enforcement provisions established in the CBJ City Code (CBJ 10.600 - 660). If the CBJ determines that a permittee has violated the terms or conditions of a permit, staff will contact the permittee, request new plans showing the actual work that has taken place, and attempt to work with the applicant to resolve the violation through their voluntary compliance with the original permit, or, if appropriate, through a permit modification approved by the Board.

If a mutually agreeable solution cannot be reached, a written order requiring compliance will normally be issued; however, issuance of an order is not a prerequisite to legal action. If an order is issued, it will specify a time period of not more than 30 days for the developer to bring the project into compliance. If the permittee fails to comply with the order within the specified period of time, the CBJ may consider suspending or revoking the permit, or it may pursue legal action.

The CBJ will pursue criminal or civil actions to obtain penalties for violations, compliance with the orders it has issued, or other relief as appropriate. Appropriate cases for civil or criminal action include, but are not limited to, violations that in the opinion of the CBJ are willful, repeated, flagrant, or of substantial impact.

Local enforcement measures can not supersede or replace the authority of the Corps of Engineers and the U.S. Environmental Protection Agency to enforce the Clean Water Act, including enforcement against unauthorized fills and violations of individual wetlands permits or General Permits 2000-01, -02, and -03.

ADDITIONAL MANAGEMENT TECHNIQUES FOR WETLANDS

The City and Borough of Juneau will take steps to alleviate development pressure on high and medium high value wetlands. The CBJ will retain high value wetlands (Category A and B) that are in city ownership and manage them for environmental protection. The CBJ will also seek to acquire additional Category A and EP wetlands, as funding or opportunities for land trades permit.

The CBJ will consider wetland designations and the goal of preserving high and medium high value wetlands during its biennial revisions of the CBJ's Comprehensive Plan. The reports of the Wetlands Review Board on cumulative changes to Juneau's wetlands, and the Board's ideas for land use policy or zoning changes to implement wetlands protection goals, will be considered by the CBJ Planning Commission and Assembly during Comprehensive Plan revisions. Public and agency comments on changes to Juneau's land use plans and ordinances to further wetlands protection goals will also be considered.

TAX ASSESSMENTS FOR WETLANDS PROPERTY

The CBJ will encourage private land owners to protect Category A and B wetlands by considering the wetland management classification when fair market values are determined during property tax calculations. The CBJ will consider the presence of wetlands on a property, and the effect on its development potential, when determining the fair market value for property tax assessments. The CBJ Assessor is authorized to consider denied permits in a property assessment. In addition, any owner of a wetland classified as Category A or B may request, and the tax assessor shall provide, that this fact be taken into account when the property is assessed.

REPORTS ON GENERAL PERMIT ADMINISTRATION

The CBJ Community Development Department will submit quarterly reports to the Corps of Engineers reporting on the implementation of General Permits 2000-01, -02, and -03 (Appendix II-F). The quarterly reports shall compile information on local wetlands permits issued by the Wetlands Review Board under the General Permit and shall include copies of all applications and wetlands permits.

The Department shall also submit an annual report to the Corps that tallies the total acreage permitted for discharge of dredged and fill material, the number of local wetlands permits granted, the average permit processing time, and monitoring and enforcement activities.

The Department has developed a computer database for recording information regarding the local wetlands permits issued by the Board. A copy of the database will be submitted to the Corps of Engineers with each annual report.

WETLANDS PLAN AMENDMENTS

The Juneau Wetlands Management Plan may be amended by the CBJ at any time to include new wetland areas into the plan, incorporate new information regarding wetland values, revise Designated Important Wetland Management classifications, revise or supplement the standards for issuance of permits, or make other changes necessary for the proper management of wetlands in the Juneau area. As a matter of course, the Juneau Wetlands Management Plan should be reviewed and updated every five years to respond to new data and to improve its implementation.

Every ten years, the CBJ must review and submit the Juneau Wetlands Management Plan to the State Department of Natural Resources, Office of Project Management and Permitting for re-approval (11 AAC 114.365 (b)). The submittal must include an evaluation of the plan effectiveness and implementation, a presentation of any new issues, and a recommendation for resolving any problem that have arisen.

SCOPE OF PLAN REVIEW

The plan review will include information on the number of wetlands permits issued through the local wetland permit process; the number of acres filled; loss of wetland functions and values; the status and implementation of the Wetlands Mitigation Bank; and other information necessary to evaluate cumulative impacts, other requirements of the Corps of Engineers, or compliance with the requirements of the Alaska Coastal Management Program.

The environmental scores for the wetlands inventoried in the Juneau Wetlands Management Plan area a result of a rapid assessment of wetlands by Adamus Resource Associates, under contract to the CBJ. The rapid assessment is, in turn, based on a field check of the Adamus Wetland Evaluation Technique calibrated for Southeast Alaska. The scores are subject to revision if they are contradicted by new field work. The Wetlands Review Board will be authorized to obtain additional field work as needed to evaluate individual proposals.

The CBJ Planning Commission wants to alleviate pressure on wetlands within heavily utilized zoning districts by making appropriate rezones. At that time, the land use inventory will be recalculated to reflect any additions to the existing supply of developable land for any zoning district. The relative value of individual wetlands functions within a Designated Important Wetland Management unit or drainage basin also may change as wetlands are developed. Certain functions may become scarce, and therefore increase in value in the future. The Wetlands Review Board will keep track of impacts to individual functions so that the scarcity of any function can be considered during individual project reviews. This information will also be used to update the Juneau Wetlands Management Plan and may result in the reclassification of management categories.

PROCESS FOR PLAN AMENDMENTS

The review of the Juneau Wetlands Management Plan will be conducted by the Wetlands Review Board, with assistance from the Community Development Department and oversight and participation by the state and federal resource agencies. Public and agency comments on the implementation of the plan and any suggested changes will be solicited. Formal opportunities for public involvement, including public notice, will be provided by the Wetlands Review Board.

Any significant revisions to the Juneau Wetlands Management Plan, including changes to management designations, policies and implementation techniques, will also be reviewed and approved by the CBJ Planning Commission and Assembly. Formal opportunities for public involvement in this process, including public notice, will again be provided.

Amendments to the Juneau Wetlands Management Plan will be processed by the State Department of Natural Resources, Office of Project Management and Permitting, as either a "significant amendment" or a "minor amendment" to the Juneau Coastal Management Program, in accordance with State regulation (11 AAC 114, Article 3). A significant amendment is defined in 11 AAC 114.990 (42). A change that is not a significant amendment is considered to be a minor amendment and is described in 11 AAC 114.340. The State Department of Natural Resources, Office of Project Management and Permitting, in consultation with the CBJ and the State agencies participating in the Alaska Coastal Management Program, will determine whether a change to the Juneau wetlands plan is a significant amendment or a minor amendment.

If the plan amendment affects wetlands units covered under the General Permit, then the approval of the Corps of Engineers will also be required.

APPENDIX II-A DEFINITIONS

Designated Important Wetland Habitat Category: The wetlands designations used by the CBJ from AI to UM11. This term is used interchangeably with **wetland unit**.

Developed: The value of improvements on the property is greater than twice the land value.

Discharge of Dredged Material: Any addition of dredged material into wetlands.

Discharge of Fill Material: The addition of fill material into wetlands.

Dredged Material: Material that is excavated or dredged from wetlands.

Enhancement: Increase in functional value.

Estuarine Wetlands: Tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is diluted by freshwater runoff.

Fill Material: Any material used for the primary purpose of replacing a wetland with dry land. Pilings are not considered to be fill material.

11 AAC 112.900 (13) "**freshwater wetlands**" means those environments characterized by rooted vegetation that is partially submerged either continuously or periodically by surface freshwater with less than 0.5 parts per thousand salt content and not exceeding three meters in depth; (*Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172*) Authority: AS 46.39.010, AS 46.39.040, AS 46.40.040, AS 46.39.030, AS 46.40.010

In-kind mitigation means replacing a wetland that is being altered with a wetland of the same physical and functional type.

Lacustrine Wetlands: Wetlands situated in a topographic depression or a dammed river channel, lacking persistent vegetation greater than 30 % aerial coverage, and whose total area exceeds 20 acres.

Mitigation has the same meaning as in 11 AAC 112.900.

11 AAC 112.900. Sequencing process to avoid, minimize, or mitigate. (a) As used in this chapter and for purposes of district enforceable policies developed under 11 AAC 114, “avoid, minimize, or mitigate” means a sequencing process of

- (1) avoiding adverse impacts to the maximum extent practicable;
- (2) where avoidance is not practicable, minimizing adverse impacts to the maximum extent practicable; or
- (3) if neither avoidance nor minimization is practicable, conducting mitigation to the extent appropriate and practicable; for purposes of this paragraph, “mitigation” means
 - (A) on-site rehabilitation of project impacts to affected coastal resources during or at the end of the life of the project; or
 - (B) to the extent on-site rehabilitation of project impacts is not practicable, substituting, if practicable, rehabilitation of or an improvement to affected coastal resources within the district, either on-site or off-site, for a coastal resource that is unavoidably impacted.

(b) For a project that requires a federal authorization identified under 11 AAC 110.400, the coordinating agency shall consult with the authorizing federal agency during that federal agency’s authorization review process to determine whether the mitigation requirements proposed by the federal agency for that federal authorization would satisfy the mitigation requirements of (a)(3) of this section. If the coordinating agency determines that the mitigation requirements proposed by the federal agency would not satisfy the mitigation requirements of (a)(3) of this section, the coordinating agency shall require appropriate mitigation in accordance with (a)(3) of this section.

(c) For purposes of (a)(3) of this section, a determination of practicability includes the consideration of the following factors, as applicable:

- (1) the magnitude of the functional values lost by the impacted coastal resources;
- (2) the likelihood that the mitigation measure or improvement will succeed in actually rehabilitating the impacted coastal resources; and
- (3) the correlation between the functional values lost by the coastal resources impacted and the proposed mitigation measure or improvement.

(d) To the extent feasible and not otherwise addressed by state or federal law, any requirements imposed under (a)(3) of this section for mitigation through on-site or off-site rehabilitation of project impacts shall be established by the coordinating agency at the time of the project’s consistency review under 11 AAC 110.

(e) In applying the mitigation process described in (a)(3) of this section, unless required by a federal agency issuing an authorization identified under 11 AAC 110.400 for the project, the coordinating agency may not require

- (1) that no net loss of impacted coastal resources occur; or
- (2) monetary compensation.

(Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172) Authority: AS 46.39.010 AS 46.39.040 AS 46.40.040 AS 46.39.030 AS 46.40.010

On-site means an area within the parcel boundaries.

Off-site means an area outside of the parcel boundaries.

Out-of-kind mitigation means replacing a wetland that is being altered with a wetland of a different physical and functional type (CBJ wetlands mitigation bank or land trust that preserves or restores wetlands within the district may be considered out-of-kind mitigation).

Palustrine Wetlands: Non-tidal wetlands dominated by trees, shrubs, persistent emergents, or emergent mosses or lichens.

Practicable has the same meaning as in 11 AAC 112.990.

11 AAC 112.990. (a) (18) "practicable" means feasible in light of overall project purposes after considering cost, existing technology, and logistics of compliance with the standard; (Eff. 7/1/2004, Register 170)

Public need has the same meaning as in Alaska regulation except that "documented" means expressed in locally adopted plans, studies, policies and standards.

11 AAC 114.990 (35) "public need" means a documented need of the general public and not that of a private person; (Eff. 7/1/2004, Register 170)

Riverine Wetlands: Wetlands in a freshwater channel; the channel either natural or artificial

11 AAC 112.900 (25) "**saltwater wetlands**" means those coastal areas along sheltered shorelines characterized by halophilic hydrophytes and macroalgae extending from extreme low tide to an area above extreme high tide that is influenced by sea spray or tidally induced water table changes; (Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172) Authority: AS 46.39.010, AS 46.39.040, AS 46.40.040, AS 46.39.030, AS 46.40.010

11 AAC 112.900 (33) "**wetlands**" means saltwater wetlands and those freshwater wetlands that have a direct drainage to coastal waters; (Eff. 7/1/2004, Register 170; am 10/29/2004, Register 172) Authority: AS 46.39.010, AS 46.39.040, AS 46.40.040, AS 46.39.030, AS 46.40.010

Wetlands Unit: The wetlands designations used by the CBJ from AI to UM11. This term is used interchangeably with **Designated Important Wetland Habitat Category**.

Wetland Functional Value: The weighted sum of the functional values as per the Wetlands Management Plan formula.

APPENDIX II-B WETLANDS PLAN DOCUMENTS

JUNEAU WETLANDS MANAGEMENT PLAN includes the following documents:

"Revised Juneau Wetlands Management Plan," City and Borough of Juneau, February 1997.

"Juneau Wetlands Management Plan Map Appendix," City and Borough of Juneau, May 1994.

"Juneau Wetlands Functions and Values," Adamus Resource Assessment Inc., September 1987.

"Juneau Wetlands Functions and Values Map Appendix," Adamus Resource Assessment Inc. and City and Borough of Juneau, September 1987.

"Corrections to the September 1987 "Juneau Wetlands Functions and Values," Adamus Resource Assessment Inc. and City and Borough of Juneau, March 1988.

ENVIRONMENTAL DATA for the Juneau Wetlands Management Plan is published in three documents:

"Juneau Wetlands Functions and Values," Adamus Resource Assessment Inc., September 1987.

"Juneau Wetlands Functions and Values Map Appendix," Adamus Resource Assessment Inc. and City and Borough of Juneau, September 1987.

"Corrections to the September 1987 "Juneau Wetlands Functions and Values," Adamus Resource Assessment Inc. and City and Borough of Juneau, March 1988.

METHODOLOGY FOR THE ENVIRONMENTAL DATA COLLECTION is published in:

"Rapid Assessment for Southeast Alaska," Adamus Resource Assessment Inc., September 1987.

HYDROLOGIC AL COMPONENT is published in:

"The Recharge Discharge Function of Wetlands Near Juneau, Alaska: Part I Hydrogeological Investigations," Dr. D. I. Siegel, in Ground Water. Vol. 26, No. 4, September-October 1988.

"The Recharge Discharge Function of Wetlands Near Juneau, Alaska: Part II Geochemical Investigations," Dr. D. I. Siegel, in Ground Water. Vol. 26, No. 5, July-August, 1988.

RECREATION COMPONENT is published in:

"Measuring Human Values Associated with Wetlands: Comparing Public Meetings and Sample Surveys," "Human Use Values of Wetlands: An Assessment in Juneau, Alaska," and "Visual Amenity Value of Wetlands: An Assessment in Juneau, Alaska," by Dr. James Palmer and Dr. Richard Smardon in *Intractable Conflicts and their Transformations*.

PUBLIC PREFERENCES are published by the City and Borough of Juneau in the following documents:

"Juneau Wetlands Functions and Values, Land Management, Juneau Resident Comments," Ira Winograd, March 1987.

"Public Opinion Statistical Review," Ira Winograd and David Goade, March 1988.

OVERALL PROJECT METHODOLOGY is published in:

"Comprehensive Special Area Management Planning - Juneau, Alaska, Case Study," Ira Winograd in Urban Wetlands, the Association of State Wetland Managers, Inc.

APPENDIX II-C

MAPS OF DESIGNATED IMPORTANT WETLAND MANAGEMENT CATEGORIES

The following maps show the locations of Designated Important Wetland Management Categories classified through the Juneau Wetlands Management Plan and lists their designations (Category A, B, C, D or EP). Please refer to the *Juneau Wetlands Management Plan Map Atlas* (May 1994) for a larger scale map of each Designated Important Wetland Management unit.

These maps include the revisions required by the U.S. Army Corps of Engineers authorization of General Permits 2000-01, 2000-02, and 2000-03.

These maps were revised again in 2005 to include mapping protocols required by the Office of Project Management and Permitting, Department of Natural Resources. The most recent revisions (November 2007) distinguished between Designated Important Wetland Management Categories in federal and non-federal ownership. Wetlands units in federal ownership are still important to the management of wetlands and are being included as resource inventory information. Those units in non-federal ownership are being nominated for important habitat designations under the Alaska Coastal Management Program. Other revisions were made to clarify that estuarine wetlands are included for resource information only and are not designated important habitat nor classified A,B,C, or D under the management classification system.

JUNEAU WETLANDS MANAGEMENT PLAN STUDY AREA Management and Important Habitat Designations Index Map

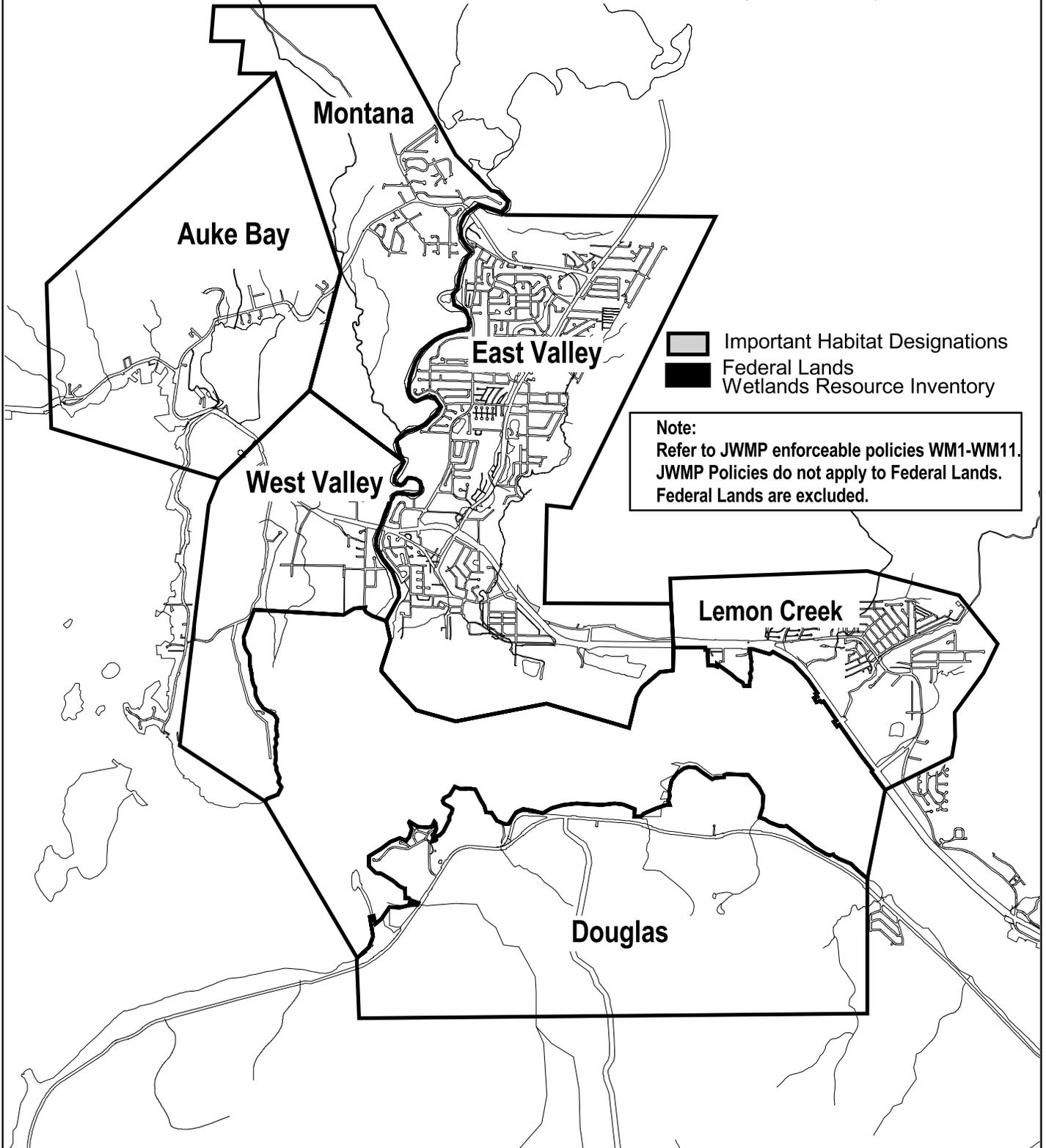
Juneau Coastal Management Plan
November 2007



800 0 800 Feet



Source: Base Maps: City & Borough of Juneau/Geographic Information System
Wetland Boundaries: Juneau Wetlands Management Plan- May 1994



JUNEAU WETLANDS MANAGEMENT PLAN

Management and Important Habitat Designations

AUKE BAY

Juneau Coastal Management Plan
November 2007

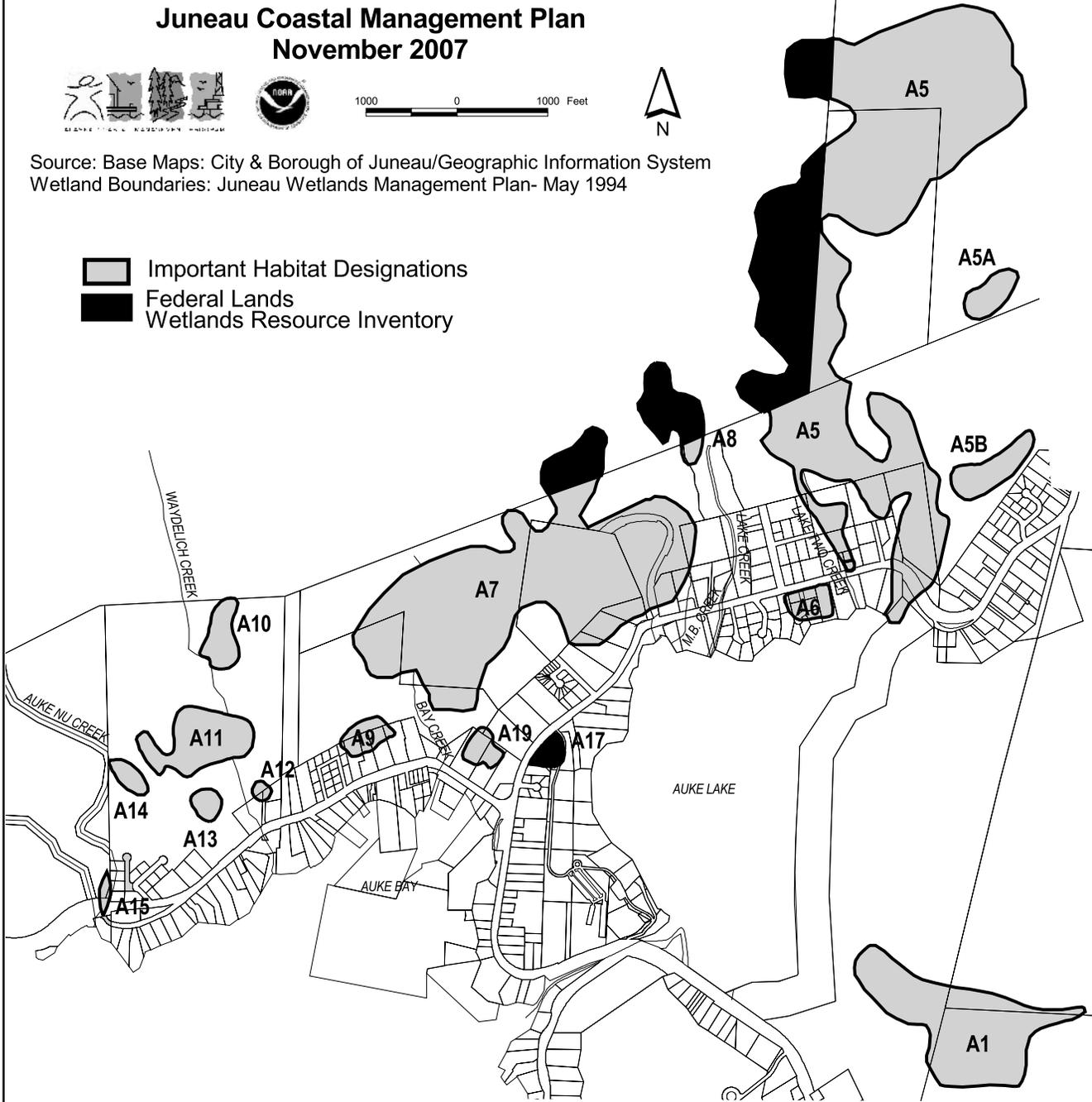


1000 0 1000 Feet



Source: Base Maps: City & Borough of Juneau/Geographic Information System
Wetland Boundaries: Juneau Wetlands Management Plan- May 1994

- Important Habitat Designations
- Federal Lands
- Wetlands Resource Inventory



(See MONTANA Map
for this area)

(See WEST VALLEY Map)
for this area

WETLAND CATEGORIES

| | | | |
|-----|------|-----|------|
| A1 | C | A10 | B |
| A5 | A(R) | A11 | B(S) |
| A5A | C | A12 | C |
| A5B | C | A13 | B |
| A6 | B(R) | A14 | C |
| A7 | B(S) | A15 | C |
| A8 | C | A17 | C |
| A9 | C | A19 | D |

(R) refers to Residential Road Corridor
(S) refers to Anadromous Stream and Lake Corridor*

Note:
Refer to JWMP enforceable policies WM1-WM11.
JWMP Policies do not apply to Federal Lands.
Federal Lands are excluded.

* Anadromous water bodies are determined by the latest CBJ- adopted version of the Alaska Department of Fish and Game's "Water Important to Spawning, Rearing, or Migration of Anadromous Fishes- Southeastern Region."

JUNEAU WETLANDS MANAGEMENT PLAN

Management and Important Habitat Designations

MONTANA

Juneau Coastal Management Plan

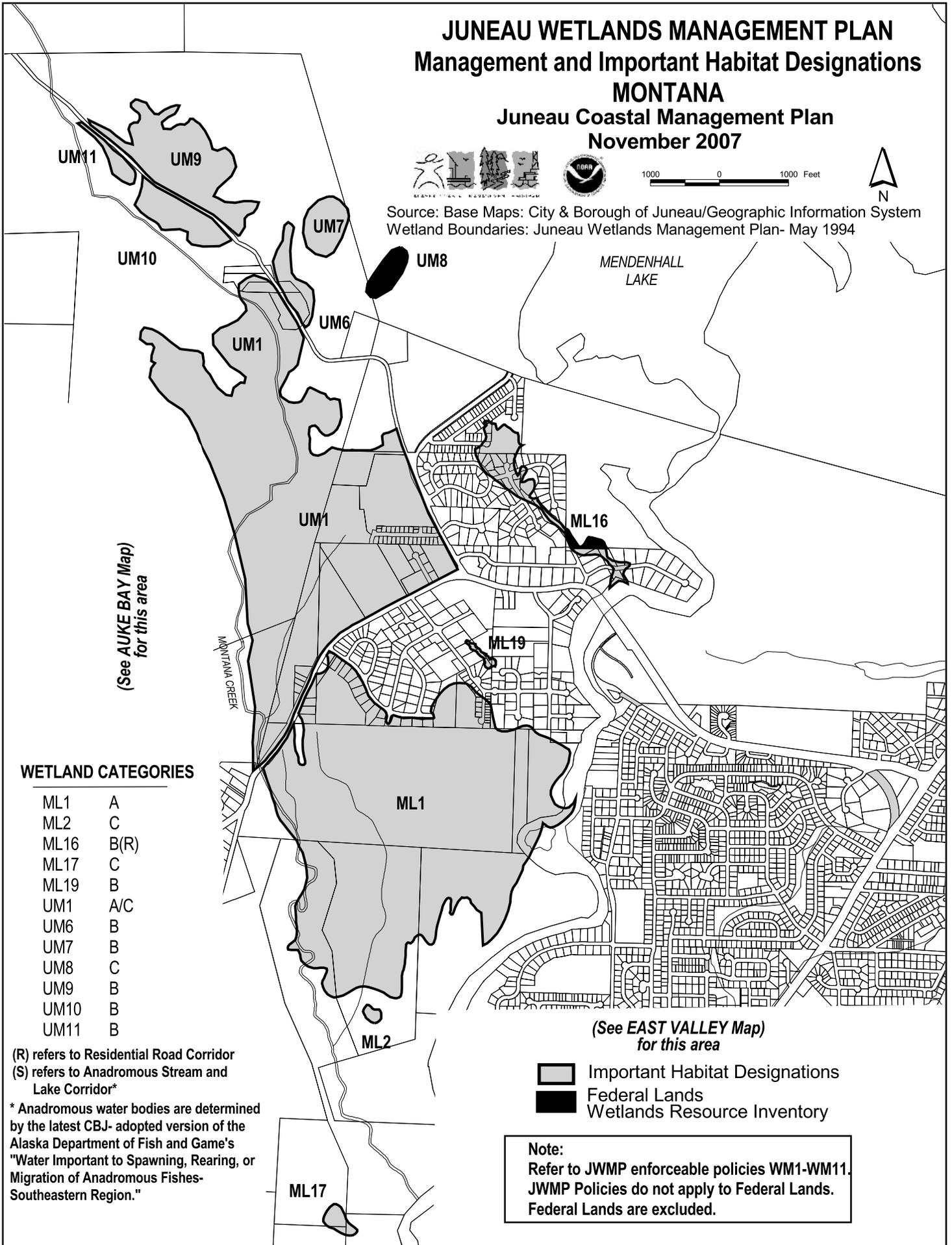
November 2007



1000 0 1000 Feet



Source: Base Maps: City & Borough of Juneau/Geographic Information System
Wetland Boundaries: Juneau Wetlands Management Plan- May 1994



(See AUKE BAY Map)
for this area

(See EAST VALLEY Map)
for this area

WETLAND CATEGORIES

| | |
|------|------|
| ML1 | A |
| ML2 | C |
| ML16 | B(R) |
| ML17 | C |
| ML19 | B |
| UM1 | A/C |
| UM6 | B |
| UM7 | B |
| UM8 | C |
| UM9 | B |
| UM10 | B |
| UM11 | B |

(R) refers to Residential Road Corridor
(S) refers to Anadromous Stream and Lake Corridor*

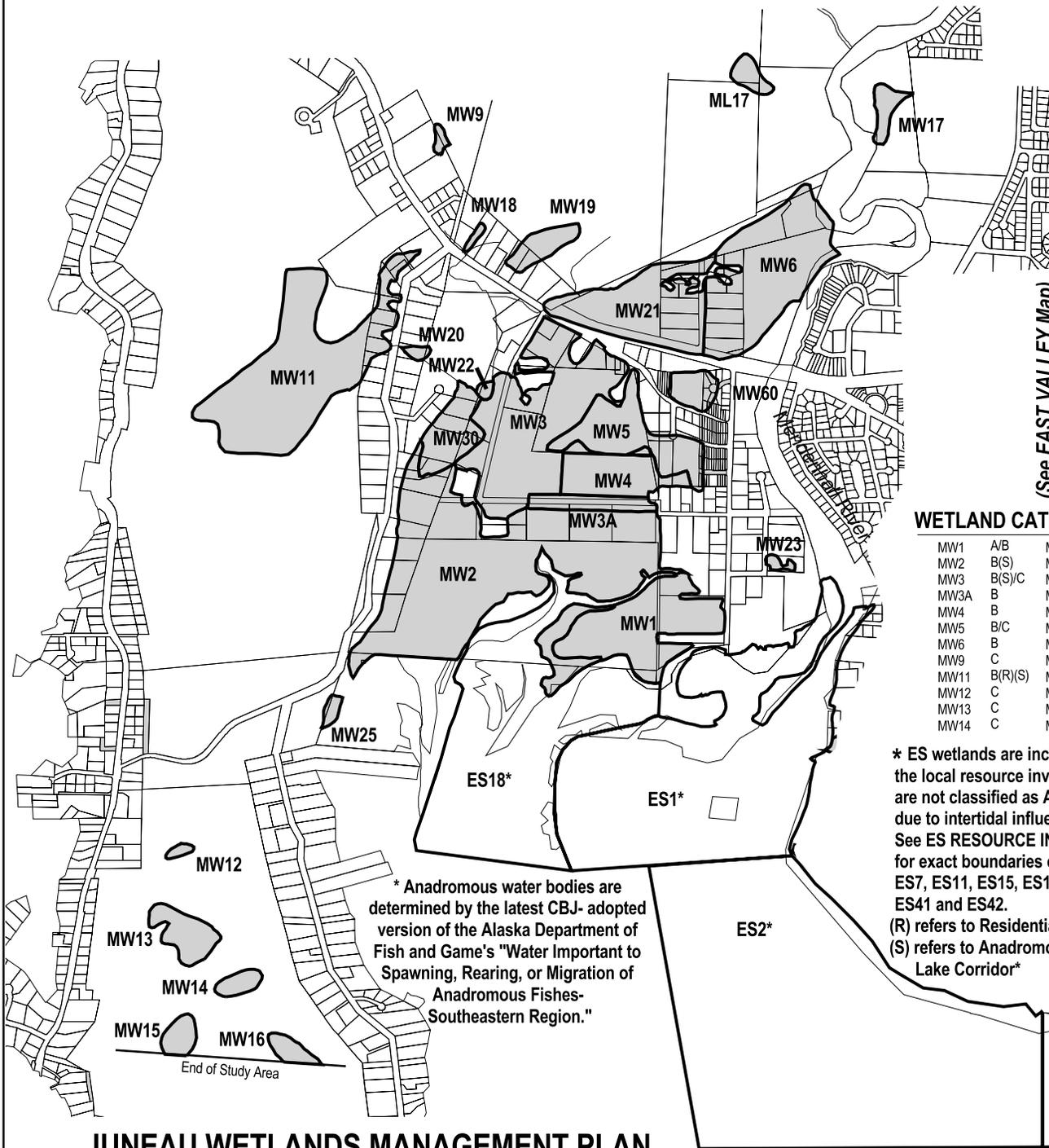
* Anadromous water bodies are determined by the latest CBJ- adopted version of the Alaska Department of Fish and Game's "Water Important to Spawning, Rearing, or Migration of Anadromous Fishes- Southeastern Region."

Important Habitat Designations
 Federal Lands
 Wetlands Resource Inventory

Note:
Refer to JWMP enforceable policies WM1-WM11. JWMP Policies do not apply to Federal Lands. Federal Lands are excluded.

(See AUKE BAY Map
for this area

(See EAST VALLEY Map
for this area



WETLAND CATEGORIES

| | | | |
|------|---------|------|------|
| MW1 | A/B | MW15 | C |
| MW2 | B(S) | MW16 | C |
| MW3 | B(S)/C | MW17 | C |
| MW3A | B | MW18 | C |
| MW4 | B | MW19 | D |
| MW5 | B/C | MW20 | B(S) |
| MW6 | B | MW21 | B(S) |
| MW9 | C | MW22 | C(S) |
| MW11 | B(R)(S) | MW23 | C |
| MW12 | C | MW25 | B |
| MW13 | C | MW30 | B(S) |
| MW14 | C | MW60 | C |

* ES wetlands are included in the local resource inventory but are not classified as A,B,C and D due to intertidal influence. See ES RESOURCE INVENTORY page for exact boundaries of ES1, ES2, ES5, ES7, ES11, ES15, ES18, ES40, ES41 and ES42. (R) refers to Residential Road Corridor (S) refers to Anadromous Stream and Lake Corridor*

* Anadromous water bodies are determined by the latest CBJ- adopted version of the Alaska Department of Fish and Game's "Water Important to Spawning, Rearing, or Migration of Anadromous Fishes- Southeastern Region."

JUNEAU WETLANDS MANAGEMENT PLAN
Management and Important Habitat Designations
WEST VALLEY

Juneau Coastal Management Plan
November 2007

Important Habitat Designations
 Federal Lands
 Wetlands Resource Inventory

Note:
Refer to JWMP enforceable policies WM1-WM11. JWMP Policies do not apply to Federal Lands. Federal Lands are excluded.



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Note:
 Refer to JWMP enforceable policies WM1-WM11.
 JWMP Policies do not apply to Federal Lands.
 Federal Lands are excluded.

(See WEST VALLEY Map
 for this area

WETLAND CATEGORIES

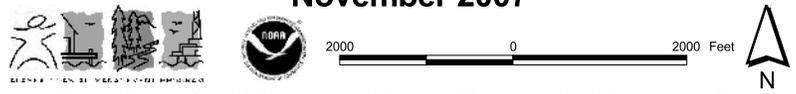
| | | | |
|-----|--------|-----|-------------|
| D2 | EP | M5 | A |
| D3 | EP | M6 | C |
| D4 | EP | M7 | B(S)/C(S) |
| D5 | EP | M8 | C |
| D6 | EP | M9 | C |
| D7 | B(S) | M10 | C |
| D8 | B(S) | M13 | C |
| J1 | B(S) | M14 | B |
| J2 | A | M15 | C |
| J3 | A | M17 | C |
| J4 | A | M18 | C |
| J5 | A(R) | M19 | D GREENBELT |
| J6 | B(S) | M21 | B GREENBELT |
| J7 | B(R)/C | M26 | B |
| M1 | B | M27 | B |
| M1A | B | M49 | C(S) |
| M1B | B | M50 | C |
| M1C | B | M51 | C(S) |
| M2 | EP | M52 | C |
| M3 | B | M53 | C(S) |
| M4 | C | | |

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 (R) refers to Residential Road Corridor
 (S) refers to Anadromous Stream and Lake Corridor*

* Anadromous water bodies are determined by the latest CBJ-adopted version of the Alaska Department of Fish and Game's "Water Important to Spawning, Rearing, or Migration of Anadromous Fishes-Southeastern Region."

JUNEAU WETLANDS MANAGEMENT PLAN
Management and Important Habitat Designations
EAST VALLEY

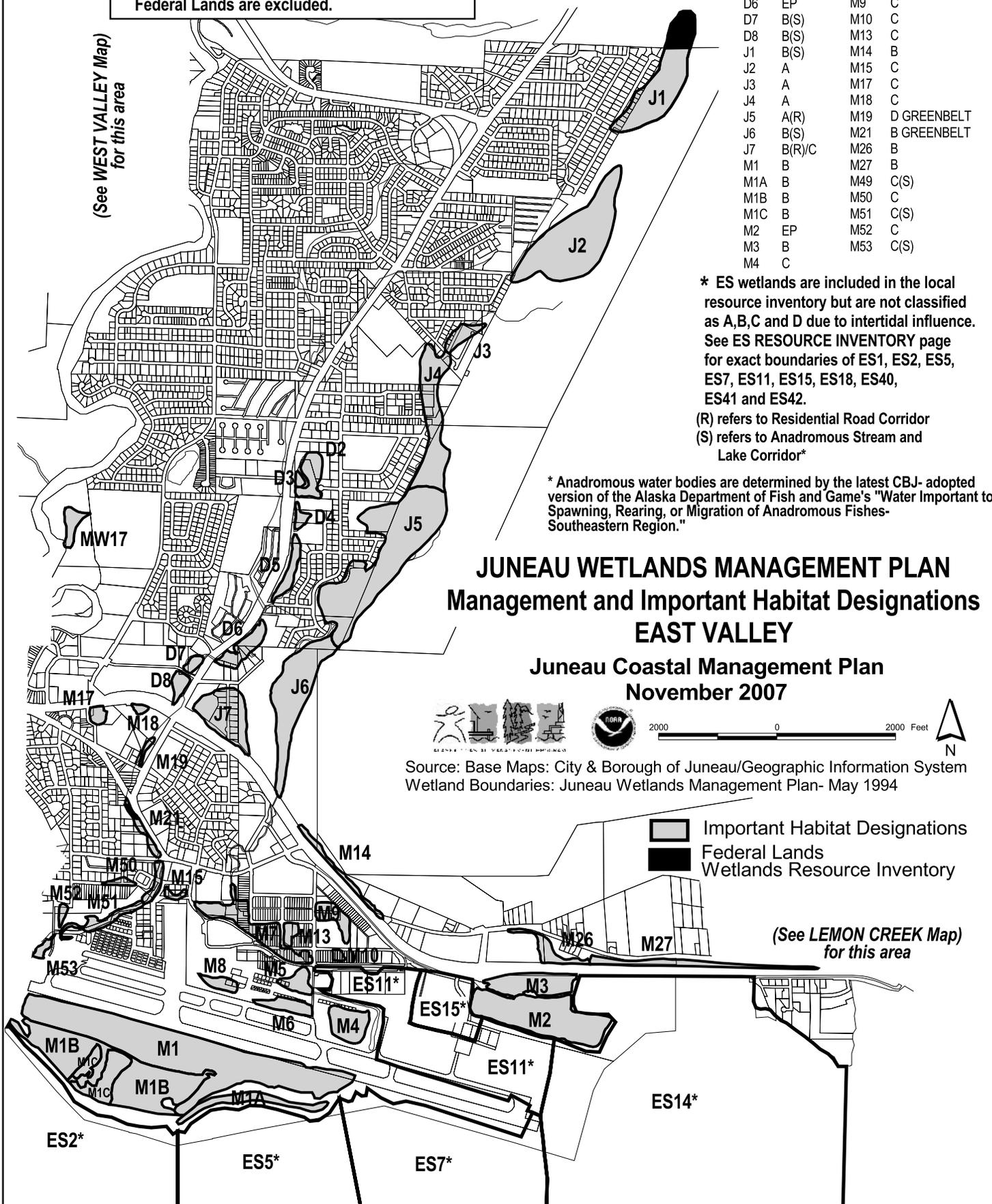
Juneau Coastal Management Plan
November 2007



Source: Base Maps: City & Borough of Juneau/Geographic Information System
 Wetland Boundaries: Juneau Wetlands Management Plan- May 1994

■ Important Habitat Designations
 ■ Federal Lands
 ■ Wetlands Resource Inventory

(See LEMON CREEK Map
 for this area



* ES wetlands are included in the local resource inventory but are not classified as A,B,C and D due to intertidal influence. See ES RESOURCE INVENTORY page for exact boundaries of ES1, ES2, ES5, ES7, ES11, ES15, ES18, ES40, ES41 and ES42.

* Anadromous water bodies are determined by the latest CBJ- adopted version of the Alaska Department of Fish and Game's "Water Important to Spawning, Rearing, or Migration of Anadromous Fishes- Southeastern Region."

(See EAST VALLEY Map for this area)

JUNEAU WETLANDS MANAGEMENT PLAN

Management and Important Habitat Designations

LEMON CREEK

Juneau Coastal Management Plan
November 2007



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Source: Base Maps: City & Borough of Juneau/Geographic Information System
Wetland Boundaries: Juneau Wetlands Management Plan- May 1994

Note:

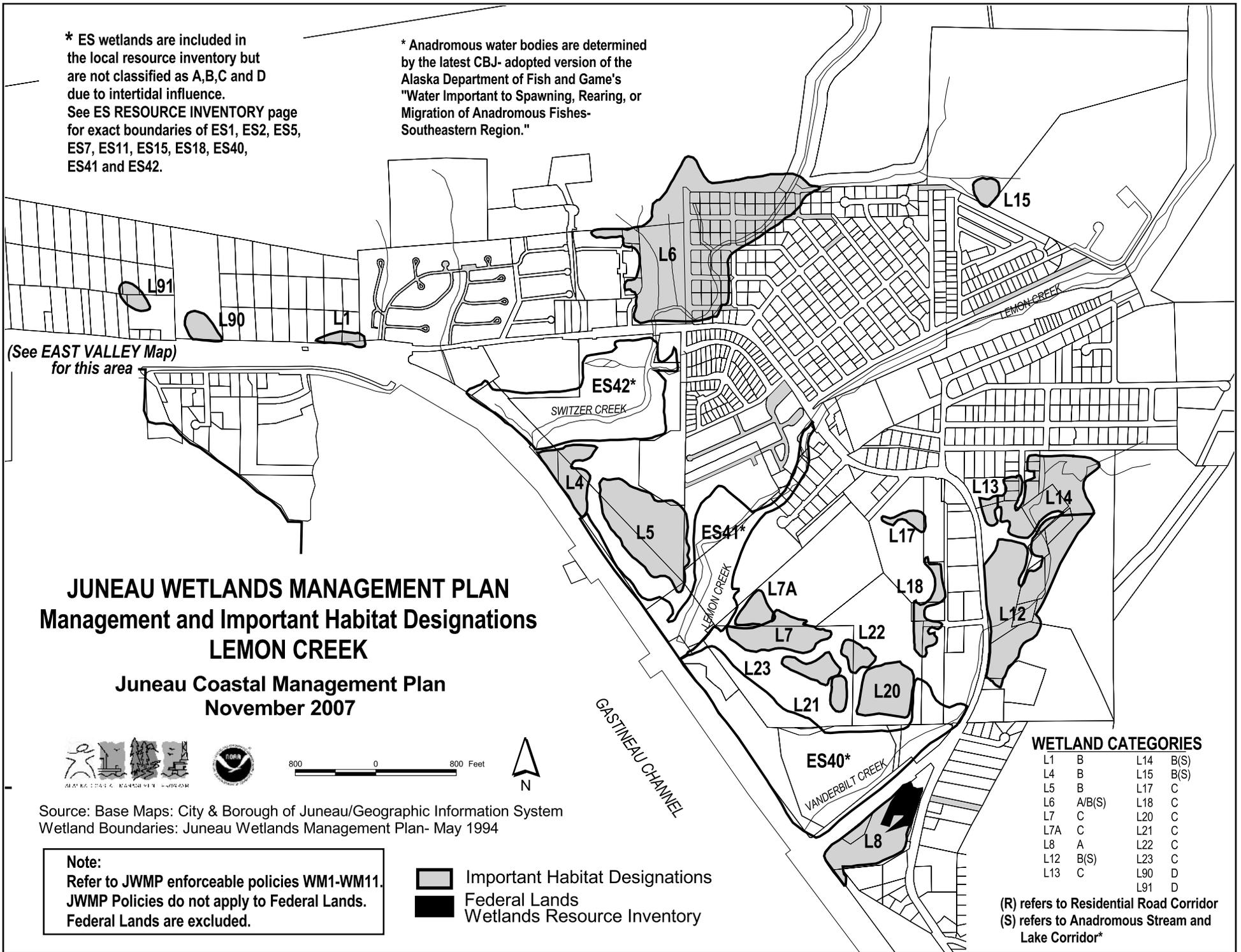
Refer to JWMP enforceable policies WM1-WM11.
JWMP Policies do not apply to Federal Lands.
Federal Lands are excluded.

- Important Habitat Designations
- Federal Lands
- Wetlands Resource Inventory

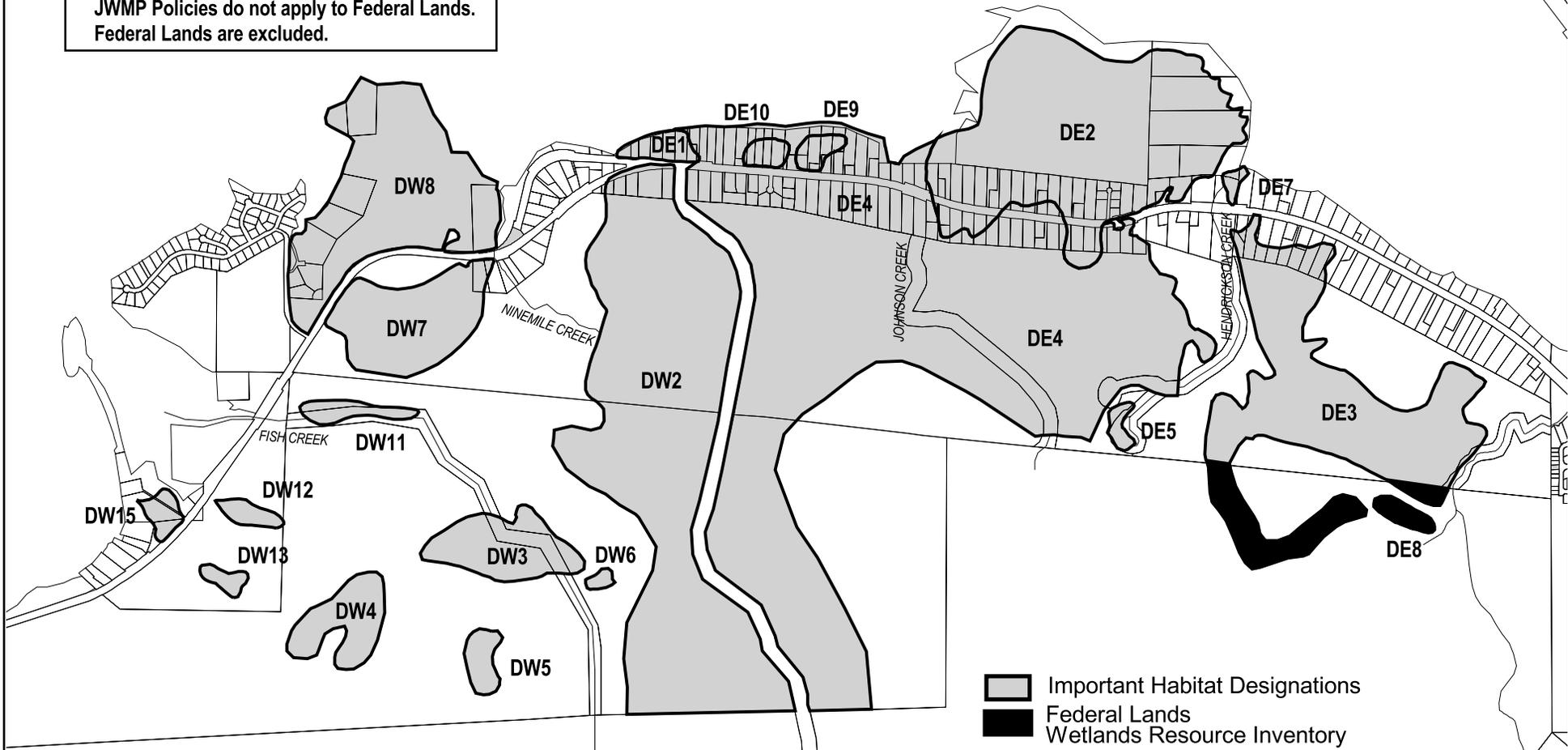
WETLAND CATEGORIES

| | | | |
|-----|--------|-----|------|
| L1 | B | L14 | B(S) |
| L4 | B | L15 | B(S) |
| L5 | B | L17 | C |
| L6 | A/B(S) | L18 | C |
| L7 | C | L20 | C |
| L7A | C | L21 | C |
| L8 | A | L22 | C |
| L12 | B(S) | L23 | C |
| L13 | C | L90 | D |
| | | L91 | D |

(R) refers to Residential Road Corridor
(S) refers to Anadromous Stream and Lake Corridor*



Note:
 Refer to JWMP enforceable policies WM1-WM11.
 JWMP Policies do not apply to Federal Lands.
 Federal Lands are excluded.

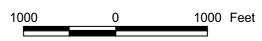


 Important Habitat Designations
 Federal Lands
 Wetlands Resource Inventory

WETLAND CATEGORIES

| | | | |
|------|---------|------|------|
| DE1 | B(R) | DW5 | C |
| DE2 | B(R) | DW6 | C |
| DE3 | A(R) | DW7 | B(R) |
| DE4 | A(R) | DW8 | B |
| DE5 | C | DW11 | C |
| DE7 | B(R)(S) | DW12 | C |
| DE9 | B(R) | DW13 | C |
| DE10 | B(R) | DW15 | B |
| DW2 | B(R) | | |
| DW3 | C | | |
| DW4 | C | | |

JUNEAU WETLANDS MANAGEMENT PLAN
Management and Important Habitat Designations
DOUGLAS
Juneau Coastal Management Plan
November 2007



Source: Base Maps: City & Borough of Juneau/Geographic Information System
 Wetland Boundaries: Juneau Wetlands Management Plan- May 1994

(R) refers to Residential Road Corridor
 (S) refers to Anadromous Stream and Lake Corridor*

* Anadromous water bodies are determined by the latest CBJ- adopted version of the Alaska Department of Fish and Game's "Water Important to Spawning, Rearing, or Migration of Anadromous Fishes- Southeastern Region."

JUNEAU WETLANDS MANAGEMENT PLAN ES RESOURCE INVENTORY

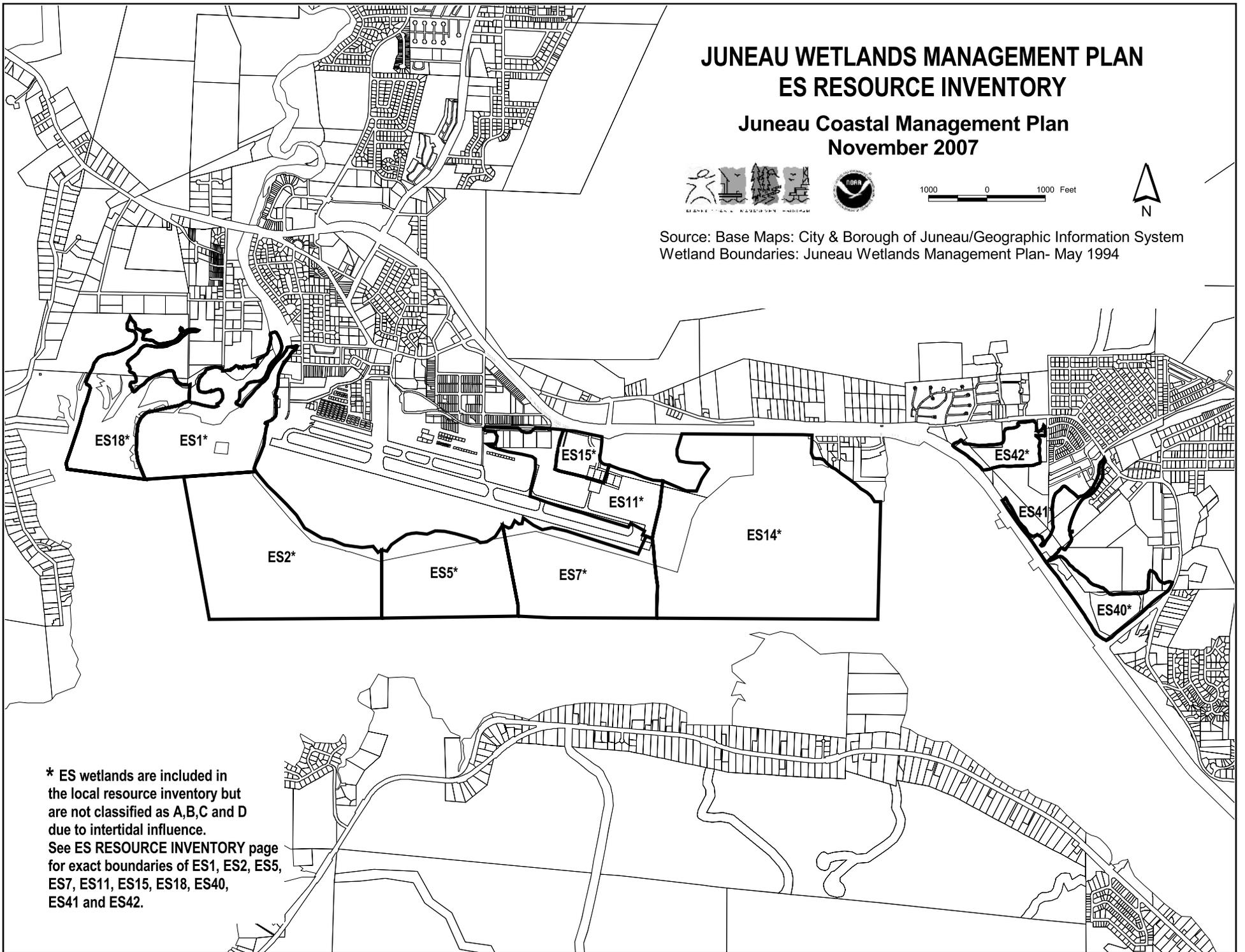
Juneau Coastal Management Plan
November 2007



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Source: Base Maps: City & Borough of Juneau/Geographic Information System
Wetland Boundaries: Juneau Wetlands Management Plan- May 1994



* ES wetlands are included in the local resource inventory but are not classified as A,B,C and D due to intertidal influence. See ES RESOURCE INVENTORY page for exact boundaries of ES1, ES2, ES5, ES7, ES11, ES15, ES18, ES40, ES41 and ES42.

APPENDIX II-D IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

This Appendix lists the category designations for each of the Designated Important Wetland Habitat Management Categories evaluated in the Juneau Wetlands Management Plan (Category A, B, C, D or EP). These designations are considered to be enforceable components of the wetlands plan. The management designations were determined through the process described in Chapter II, Classification Methodology.

Each Designated Important Wetland Habitat Management unit is listed along with its consolidated functional score (the environmental score determined by the City and Borough of Juneau from the Adamus WET information for each Designated Important Wetland Habitat Management unit), public preference score (PP), practicable alternatives score (PA) and zoning. The resultant management range and the final management category is shown for each Designated Important Wetland Habitat Management unit.

There is also a brief narrative description of each wetland, including general references to its location, size, land use features, accessibility and infrastructure. Special features are discussed. The narrative also describes whether or not the Anadromous Stream and Lake Corridor Rule and/or the Residential Road Corridor Rule apply to each Designated Important Wetland Habitat Management unit.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

AUKE BAY

| | | | | | | | |
|----|---|---|---------|---|-----|---|----|
| A1 | 4 | 2 | 4:D1/D5 | 3 | B-C | C | 14 |
|----|---|---|---------|---|-----|---|----|

40 inaccessible forested acres in undeveloped part of east valley about midway between Mendenhall River and Auke Lake and about midway between Old Glacier Highway and Back Loop Road. The formula allows limited use of best professional judgment for this wetland. It is Category C primarily due to a WET score that indicates low environmental values, and because the site was determined to be a "potential future disposal site" by the Corps of Engineers and Environmental Protection Agency (EPA) in an Advanced Identification determination.

| | | | | | | | |
|----|-----------|--|--|--|--------------|--|----------------|
| A2 | Auke Lake | | | | Unclassified | | 14, 15, 19, 20 |
|----|-----------|--|--|--|--------------|--|----------------|

| | | | | | | | |
|----|---|---|------------|-----|-----|------|--------|
| A5 | 1 | 1 | 4:D1/D5&RR | 2.5 | A-B | A(R) | 19, 20 |
|----|---|---|------------|-----|-----|------|--------|

44 forested acres within the study area plus 45 acres in National Forest above Auke Lake between Lake Creek and Montana Creek, in a general north/south orientation. The lower portion encompasses a Lake Creek anadromous tributary above Back Loop Road. Two residential lots are within a Category C residential road corridor (see Map Atlas).

| | | | | | | | |
|-----|---|---|---------|---|-----|---|----|
| ASA | 4 | 2 | 4:D1/D5 | 3 | B-C | C | 20 |
|-----|---|---|---------|---|-----|---|----|

3 inaccessible forested acres in undeveloped part of east valley about midway between Montana Creek and Lake Creek above Back Loop Road. The formula allows limited use of best professional judgment for this wetland. It is Category C by best professional judgment, because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|---------|---|-----|---|------------|
| A5B | 4 | 2 | 4:D1/D5 | 3 | B-C | C | 18, 19, 20 |
|-----|---|---|---------|---|-----|---|------------|

6 inaccessible forested acres in undeveloped part of east valley about midway between Montana Creek and Lake Creek above Back Loop Road. The formula allows limited use of best professional judgment for this wetland. It is Category C by best professional judgment, because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|----|---|---|---------|---|-----|------|--------|
| A6 | 3 | 2 | 4:D1/D5 | 3 | B-C | B(R) | 19, 20 |
|----|---|---|---------|---|-----|------|--------|

3 acres adjacent to the east side of the north shore of Auke Lake and bounded on the north by Old Glacier Highway. The formula allows limited use of best professional judgment. It is Category B because of its proximity to Auke Lake. Four residential lots bordering the Back Loop Road are within a Category C residential road corridor (see Map Atlas).

| | | | | | | | |
|----|---|---|------|-----|-----|------|------------|
| A7 | 2 | 3 | 4:D3 | 3.5 | B-C | B(S) | 19, 20, 21 |
|----|---|---|------|-----|-----|------|------------|

101 forested acres north of the intersection of Back Loop Road and Old Glacier Highway extending as far east to include the University of Alaska Southeast student housing and traversed by anadromous Bay Creek towards the west side, and two unnamed anadromous fish streams at the east side. The stream corridors along these fish streams are Category A (see Map Atlas).

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

| | | | | | | | |
|----|---|---|------|---|-----|---|--------|
| A8 | 4 | 2 | 4:D3 | 3 | B-C | C | 19, 20 |
|----|---|---|------|---|-----|---|--------|

11 inaccessible acres of scrub shrub vegetation immediately west of upper Lake Creek north of Auke Lake. A portion of the wetland unit is located within the National Forest. The formula allows limited use of best professional judgment for this wetland. It is Category C by best professional judgment, because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|----|---|---|---------------------|---------|-----|---|----|
| A9 | 3 | 4 | 2&5&4: D10&LC&D3 | 3&4.5&4 | B-C | c | 21 |
|----|---|---|---------------------|---------|-----|---|----|

4 acres of forested wetlands west of Bay Creek and Auke Bay Elementary School adjacent to residential development in Auke Bay. The formula allows limited use of best professional judgment for this wetland. It is Category C because it is relatively close to good access and infrastructure, and the public preference was for development. It was also determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|---------|---|-----|---|----|
| A10 | 2 | 2 | 4:D1/D3 | 3 | B-C | B | 21 |
|-----|---|---|---------|---|-----|---|----|

5 inaccessible forested acres on upper Waydelich Creek adjacent to the National Forest. The formula allows limited use of best professional judgment for this wetland. It is Category B by best professional judgment because the wetland is at the headwaters of Waydelich Creek, and is small, isolated and inaccessible.

| | | | | | | | |
|-----|---|---|---------|-----|-----|------|----|
| A11 | 2 | 1 | 4:D1/D3 | 2.5 | B-C | B(S) | 21 |
|-----|---|---|---------|-----|-----|------|----|

15 forested acres bisected by Waydelich Creek. The stream corridor along Waydelich Creek is Category A (see Map Atlas).

| | | | | | | | |
|-----|---|---|-----------|-----|-----|---|----|
| A12 | 4 | 3 | 2:D10/D15 | 2.5 | B-C | C | 21 |
|-----|---|---|-----------|-----|-----|---|----|

1 acre to the east of Waydelich Creek close to residential land in Auke Bay. Classified as Category C because it was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|-----------|-----|-----|---|----|
| A13 | 3 | 3 | 2:D10/D15 | 2.5 | B-C | B | 21 |
|-----|---|---|-----------|-----|-----|---|----|

4 acres of forested land west of Waydelich Creek.

| | | | | | | | |
|-----|---|---|------------|---|-----|---|----|
| A14 | 5 | 2 | 4:RR&D1/D3 | 3 | C-D | C | 21 |
|-----|---|---|------------|---|-----|---|----|

2 acres of inaccessible forested land on upper Bay Creek. The formula allows limited use of best professional judgment for this wetland. It is Category C by best professional judgment, because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|------|---|-----|---|----|
| A15 | 4 | 2 | 4:RR | 3 | B-C | C | 24 |
|-----|---|---|------|---|-----|---|----|

2 acres of scrub shrub vegetation near Auke Nu Creek adjacent to residential development. The formula allows limited use of best professional judgment for this wetland. It is Category C by best professional judgment because it is adjacent to residential development and infrastructure, and its WET score indicates low environmental values. This site was also determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

| | | | | | | | |
|-----|---|---|------|---|-----|---|----|
| A17 | 4 | 3 | 5:D5 | 4 | B-C | C | 21 |
|-----|---|---|------|---|-----|---|----|

2 acres of scrub shrub vegetation on Federal land bordering the south side of Back Loop Road, to the west of Auke Lake.

| | | | | | | | |
|-----|---|---|---------|-----|-----|---|----|
| A19 | 5 | 4 | 5:LC&GC | 4.5 | C-D | D | 21 |
|-----|---|---|---------|-----|-----|---|----|

2 acres of scrub shrub vegetation to the east of and adjacent to the Auke Bay Elementary School access road.

DUCK CREEK

| | | | | | | | |
|----|---|---|------------|---------|-----|----|----------|
| D2 | 2 | 1 | 1:D15 | 1 | B-C | EP | 13 |
| D3 | 2 | 2 | 1:D15 | 1.5 | B-C | EP | 13 |
| D4 | 3 | 2 | 1:D15 | 1.5 | B-C | EP | 13 |
| D5 | 3 | 2 | 1&5:D5&D15 | 1.5&3.5 | B-C | EP | 13 |
| D6 | 3 | 2 | 1&5:D5&D15 | 3.5&2 | B-C | EP | 6, 7, 13 |

These ponds were created by dredging during construction of the Mendenhall Loop Road. Although they are linked to Duck Creek, the ponds are essentially stagnant. Some are devoid of salmonids and others have low populations. The potential for salmonid habitat is medium high and there is potential to design the ponds to enhance Duck Creek productivity.

| | | | | | | | |
|----|---|---|------|---|-----|------|---|
| D7 | 3 | 3 | 5:LC | 4 | B-C | B(S) | 7 |
|----|---|---|------|---|-----|------|---|

This is a small pond adjacent to and north of the intersection of Mendenhall Mall road and the Back Loop Road, formerly a Tire pond for nearby commercial development. Most of the wetland is within a Category A stream corridor along Duck Creek (see Map Atlas).

| | | | | | | | |
|----|---|---|------|---|-----|------|---|
| D8 | 2 | 3 | 5:LC | 4 | B-C | B(S) | 7 |
|----|---|---|------|---|-----|------|---|

This is a small wetland adjacent to and south of the intersection of Mendenhall Mall Road and the Back Loop Road. Most of the wetland is within a Category A stream corridor along Duck Creek (see Map Atlas).

| | | | | | | | |
|-----|---|---|-------|---|---------------|---------------------|----|
| D11 | 4 | 1 | 1:D15 | 1 | Lakewood Pond | CBJ Unclassified | 13 |
|-----|---|---|-------|---|---------------|---------------------|----|

Lakewood Pond is a CBJ park consisting of a pond with pedestrian amenities.

DOUGLAS ISLAND, EAST OF FISH CREEK

| | | | | | | | |
|-----|---|---|-------|---|-----|------|------------|
| DE1 | 2 | 2 | 4: D1 | 3 | B-C | B(R) | 29, 30, 32 |
|-----|---|---|-------|---|-----|------|------------|

5 forested acres adjacent to residential housing between the North Douglas Highway and Gastineau Channel. Lots along the highway are in a Category C residential road corridor (see Map Atlas).

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

| | | | | | | | |
|-----|---|---|------|-----|-----|------|------------|
| DE2 | 2 | 1 | 4:01 | 2.5 | B-C | B(R) | 27, 28, 29 |
|-----|---|---|------|-----|-----|------|------------|

172 scrub shrub vegetated acres constituting a peninsula on the channel side of North Douglas Highway between Hendrickson Creek and Johnson Creek. Most of the interior is CBJ owned and is managed for open space. There is a Category C residential road corridor along the highway (see Map Atlas).

| | | | | | | | |
|-----|---|---|---------|-----|-----|------|--------|
| DE3 | 1 | 1 | 4:D1&RR | 2.5 | A-B | A(R) | 27, 28 |
|-----|---|---|---------|-----|-----|------|--------|

95 acres of predominantly scrub shrub vegetation, east of Hendrickson Creek above North Douglas Highway. One platted lot bordering North Douglas Highway is in a Category C residential road corridor (see Map Atlas).

| | | | | | | | |
|-----|---|---|---------|-----|-----|------|--------------------|
| DE4 | 1 | 1 | 4:D1&RR | 2.5 | A-B | A(R) | 27, 28, 29, 30, 32 |
|-----|---|---|---------|-----|-----|------|--------------------|

Approximately 500 scrub shrub and forested acres in a large bog on the east side of Fish Creek Road above and below North Douglas Highway as far east as Hendrickson Creek, and including Johnson Creek. The property bordering the highway is within a Category C residential road corridor. Johnson Creek has a Category A stream corridor where it passes through the residential road corridor (see Map Atlas). The CBJ and State own the platted lots traversed by Johnson Creek.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| DE5 | 5 | 1 | 4:RR | 2.5 | C-D | C | 28 |
|-----|---|---|------|-----|-----|---|----|

3 isolated acres south and upland of North Douglas Highway.

| | | | | | | | |
|-----|---|---|------|---|-----|---------|--------|
| DE7 | 2 | 2 | 4:D1 | 3 | B-C | B(R)(S) | 27, 28 |
|-----|---|---|------|---|-----|---------|--------|

3 acres of scrub shrub vegetation bisected by a small anadromous fish stream on the channel side of North Douglas Highway. The stream corridor is Category A. That portion of the wetland unit in the residential road corridor, but not within the Category A stream corridor, is designated Category C. The formula allows use of best professional judgment on the portion of the wetland unit that is neither within the stream corridor nor the residential road corridor. That section was designated as Category B due to its adjacency to the fish stream. (See Map Atlas).

| | | | | | | | |
|-----|---|---|------|-----|-----|---------|------------|
| DE8 | 3 | 1 | 4:RR | 2.5 | B-C | Federal | 26, 27, 28 |
|-----|---|---|------|-----|-----|---------|------------|

Unclassified
Small, isolated inaccessible parcel within the National Forest.

| | | | | | | | |
|-----|---|---|------|---|-----|------|----|
| DE9 | 2 | 2 | 4:D1 | 3 | B-C | B(R) | 29 |
|-----|---|---|------|---|-----|------|----|

5 acres of scrub shrub vegetation on the channel side of North Douglas Highway. Lots bordering the highway are in a Category C residential road corridor (see Map Atlas).

| | | | | | | | |
|------|---|---|------|---|-----|------|----|
| DE10 | 2 | 2 | 4:D1 | 3 | B-C | B(R) | 29 |
|------|---|---|------|---|-----|------|----|

3 acres of scrub shrub vegetation on the channel side of North Douglas Highway. Lots bordering the highway are in a Category C residential road corridor (see Map Atlas).

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

DOUGLAS ISLAND, WEST OF FISH CREEK

| | | | | | | | |
|-----|---|---|---------|-----|-----|------|------------|
| DW2 | 2 | 1 | 4:D1&RR | 2.5 | B-C | B(R) | 29, 30, 32 |
|-----|---|---|---------|-----|-----|------|------------|

Approximately 225 scrub shrub and forested acres in a large bog on the west side of Fish Creek Road above North Douglas Highway. The lots bordering the highway are within a Category C residential road corridor (see Map Atlas).

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| DW3 | 4 | 1 | 4:RR | 2.5 | B-C | C | 32 |
|-----|---|---|------|-----|-----|---|----|

14 isolated inaccessible forested acres west of upper Fish Creek Road. Classified as Category C because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| DW4 | 4 | 1 | 4:RR | 2.5 | B-C | C | 32 |
|-----|---|---|------|-----|-----|---|----|

22 isolated inaccessible forested acres west of upper Fish Creek Road. Classified as Category C because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| DW5 | 5 | 1 | 4:RR | 2.5 | C-D | C | 32 |
|-----|---|---|------|-----|-----|---|----|

10 isolated inaccessible forested acres west of upper Fish Creek Road.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| DW6 | 4 | 1 | 4:RR | 2.5 | B-C | C | 32 |
|-----|---|---|------|-----|-----|---|----|

1 isolated inaccessible forested acre west of upper Fish Creek Road. Classified as Category C because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|---------|---|-----|------|--------|
| DW7 | 3 | 2 | 4:RR&D1 | 3 | B-C | B(R) | 30, 32 |
|-----|---|---|---------|---|-----|------|--------|

52 forested acres south of, and partially adjacent to, North Douglas Highway. A small portion of the northeast corner is in a Category C residential road corridor (see Map Atlas). The formula allows use of best professional judgment on the portion of the wetland unit outside the residential road corridor. This land is owned by the CBJ. It is designated Category B by best professional judgment because it is managed for public open space.

| | | | | | | | |
|-----|---|---|---------|-----|-----|---|------------|
| DW8 | 2 | 1 | 4:RR&D1 | 2.5 | B-C | B | 30, 31, 32 |
|-----|---|---|---------|-----|-----|---|------------|

Approximately 100 forested acres constituting a peninsula on the channel side of North Douglas Highway. The west side is adjacent to the Bayview Subdivision.

| | | | | | | | |
|-----|---|---|------|-----|-----------------|---------------------|--------|
| DW9 | 2 | 1 | 4:RR | 2.5 | Fish Creek Park | CBJ Unclassified | 31, 32 |
|-----|---|---|------|-----|-----------------|---------------------|--------|

34 scrub shrub acres owned by the CBJ and managed as part of the park and open space system.

| | | | | | | | |
|------|---|---|------|-----|-----|---|----|
| DW11 | 4 | 1 | 4:RR | 2.5 | B-C | C | 32 |
|------|---|---|------|-----|-----|---|----|

8 isolated inaccessible forested acres south of North Douglas Highway. Classified as Category C because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--|-----|----|---------|-----------|-------------------|---------------------|-------------------------|
| DW12 | 4 | 1 | 4:RR | 2.5 | B-C | C | 31, 32 |
| 5 isolated inaccessible forested acres south of North Douglas Highway. Classified as Category C because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification. | | | | | | | |
| DW13 | 5 | 1 | 4:RR | 2.5 | C-D | C | 32 |
| 4 isolated inaccessible forested acres south of North Douglas Highway. | | | | | | | |
| DW15 | 2 | 1 | 4:RR | 2.5 | B-C | B | 32 |
| 5 scrub shrub acres adjacent to North Douglas Highway on the channel side. | | | | | | | |
| DW16 | 2 | 1 | 4:RR | 2.5 | Mendenhall Refuge | Unclassified | 32 |
| DW17 | 2 | 1 | 4:RR | 2.5 | Mendenhall Refuge | Unclassified | 32 |
| DW18 | 2 | 1 | 4:RR | 2.5 | Mendenhall Refuge | Unclassified | 32 |

MENDENHALL STATE GAME REFUGE ESTUARIES

ES1 - Mendenhall
ES42 - Refuge Unclassified

All study area estuaries, except ES 41 and ES42, are part of the Mendenhall State Game Refuge, and are managed by the Alaska Department of Fish and Game in accordance with Refuge regulations. The estuaries were not included in the relative rankings used to determine wetland scores for freshwater wetlands. All estuaries will remain under Corps jurisdiction. There may be enhancement potential for waterfowl habitat and public access.

JORDAN CREEK

J1 3 1 5:D5 3 B-C B(S) 16

18 forested acres bisected by Jordan Creek, an anadromous fish stream. Application of the formula allows limited use of best professional judgment for this wetland. It is Category B by best professional judgment primarily because it is part of the general Jordan Creek drainage. The stream corridor along Jordan Creek is Category A (see Map Atlas).

J2 1 1 5:D5 3 A-B A 16

34 forested acres bisected by Jordan Creek, an anadromous fish stream. Application of the formula allows limited use of best professional judgment for this wetland. It is Category A by best professional judgment because of its high value for support of Jordan Creek.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

| | | | | | | | |
|----|---|---|------|---|-----|---|----|
| J3 | 1 | 1 | 5:D5 | 3 | A-B | A | 16 |
|----|---|---|------|---|-----|---|----|

3 forested acres bisected by Jordan Creek, an anadromous fish stream. Application of the formula allows limited use of best professional judgment for this wetland. It is Category A by best professional judgment because of its high value for support of Jordan Creek.

| | | | | | | | |
|----|---|---|------|---|-----|---|--------|
| J4 | 1 | 1 | 5:D5 | 3 | A-B | A | 13, 16 |
|----|---|---|------|---|-----|---|--------|

Approximately 40 acres of forested wetland adjacent to and immediately east of Jordan Creek. Application of the formula allows limited use of best professional judgment for this wetland. The wetland is Category A by best professional judgment because of its high value for support of Jordan Creek.

| | | | | | | | |
|----|---|---|------|---|-----|------|----|
| J5 | 1 | 1 | 5:D5 | 3 | A-B | A(R) | 13 |
|----|---|---|------|---|-----|------|----|

36 forested and scrub shrub acres. Jordan Creek meanders through the wetland unit. Application of the formula allows limited use of best professional judgment for this wetland. The wetland unit is Category A by best professional judgment because of its high value for support of Jordan Creek. A very small portion of the wetland unit on Marilyn Avenue is in a Category C residential road corridor (see Map Atlas).

| | | | | | | | |
|----|---|---|------------|-------|-----|------|-------|
| J6 | 2 | 2 | 5&2:D5&D10 | 3.542 | B-C | B(S) | 6, 13 |
|----|---|---|------------|-------|-----|------|-------|

21 forested acres. Jordan Creek crosses the length of the wetland unit in a north/south direction. The creek is protected by a Category A stream corridor (see Map Atlas). The upper portion of the unit, zoned D5 would be Category C according to the formula. However, the lower portion, zoned D10, would be Category B. The entire wetland unit is classified as Category B to protect its integrity and for consistent management.

| | | | | | | | |
|----|---|---|-------|-----|-----|--------|------|
| J7 | 2 | 3 | 2:D10 | 2.5 | B-C | B(R)&C | 6, 7 |
|----|---|---|-------|-----|-----|--------|------|

8 forested acres northeast of the intersection of Egan Drive and Mendenhall Loop Road. It is adjacent to existing development and it is served by urban utilities. It is bordered on all four sides by existing roads: Atlin Drive to the north, Teslin Street to the east, Egan Drive to the south, and the Mendenhall Loop Road to the west. The one acre of wetland west of Teslin Street is Category C. The seven acre wetland east of Teslin Street is hydrologically connected to Jordan Creek and it Category B. However, five residential lots bordering Teslin Street in this wetland unit are within a Category C residential road corridor (see Map Atlas).

LEMON CREEK

| | | | | | | | |
|----|---|---|------------|-----|-----|---|-----|
| L1 | 3 | 3 | 5&1:LC&D15 | 4&2 | B-C | B | 4,5 |
|----|---|---|------------|-----|-----|---|-----|

1 acre fronting Old Glacier Highway near the DOT/PF Southeast Regional Office Building.

| | | | | | | | |
|----|---|---|------|-----|-----|---|---|
| L4 | 2 | 1 | 4:RR | 2.5 | B-C | B | 4 |
|----|---|---|------|-----|-----|---|---|

6 acres containing an excavated borrow pit.

| | | | | | | | |
|----|---|---|------|-----|-----|---|---|
| L5 | 2 | 1 | 4:RR | 2.5 | B-C | B | 4 |
|----|---|---|------|-----|-----|---|---|

16 acre excavated borrow pit.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--|-----|----|------------|-----------|------------------|---------------------|-------------------------|
| L6 | 1 | 1 | 5&1:D5&D15 | 3&1 | A-B | A&B(S) | 3, 4 |
| <p>37 acres predominated by emergent vegetation with scrub shrub and forest on the upper portion. Switzer Creek meanders through the lower portion. The southwest portion is Category A. Application of the formula allows limited use of best professional judgment for the rest of the wetland. It is Category B by best professional judgment, except for the stream corridor along Switzer Creek, which is Category A (see Map Atlas).</p> | | | | | | | |
| L7&7A | 4 | 4 | 4:1 | 4 | B-C | C | 4 |
| <p>10 acre excavated borrow pit.</p> | | | | | | | |
| L8 | 1 | 1 | 1:D15 | 1 | A-B | A | 2 |
| <p>10 acres of emergent vegetation between Vanderbilt Hill Road and the Pioneers Home.</p> | | | | | | | |
| L12 | 2 | 1 | 5:D18&GC | 3 | B-C | B(S) | 2,3 |
| <p>18 emergent vegetation acres adjacent to the east side of old Glacier Highway and bisected by Vanderbilt Creek. The corridors along the creek are Category A. Application of the formula allows limited use of best professional judgment for the rest of the wetland unit. The wetland is Category B by best professional judgment to protect the productivity of Vanderbilt Creek.</p> | | | | | | | |
| L13 | 2 | 3 | 5:GC | 4 | B-C | C | 3 |
| <p>1 acre of forested wetland adjacent to Old Glacier Highway. L13 is separated from the Vanderbilt drainage of L12 and L14 by an old berm. While L12 and L14 have high salmonid habitat values, L13 has low salmon id habitat values.</p> | | | | | | | |
| L14 | 2 | 2 | 5:D1B&GC | 3.5 | B-C | B(S) | 3 |
| <p>9 acres of emergent vegetation within a forested area, which is crossed by Vanderbilt Creek. The corridors along the creek are Category A (see Map Atlas).</p> | | | | | | | |
| L15 | 2 | 4 | 5:D5 | 4.5 | B-C | B(S) | 3 |
| <p>1 acre of scrub shrub vegetation adjacent to Mobile Haven Trailer Park. There is a small drainage through the wetland which is a tributary to an anadromous fish stream. The stream corridor is Category A (see Map Atlas).</p> | | | | | | | |
| L17 | 4 | 4 | 4:1 | 4 | B-C | C | 3, 4 |
| <p>2 acres of scrub shrub vegetation in the industrial area between Lemon and Vanderbilt Creeks.</p> | | | | | | | |
| L18 | 2 | 4 | 4:1 | 4 | B-C | C | 2, 4 |
| <p>4 acres of emergent vegetation west of Old Glacier Highway.</p> | | | | | | | |
| L20 | 2 | 3 | 4:1 | 3.5 | B-C | C | 2, 4 |
| <p>6 acre excavated borrow pit west of Old Glacier Highway.</p> | | | | | | | |
| L21 | 2 | 3 | 4:1 | 3.5 | B-C | C | 4 |
| <p>1 acre excavated borrow pit.</p> | | | | | | | |

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--|-----|----|---------|-----------|------------------|---------------------|-------------------------|
| L22 | 4 | 2 | 4:1 | 3 | B-C | C | 4 |
| 1 acre excavated borrow pit. Application of the formula allows limited use of best professional judgment. It is Category C by best professional judgment, because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification. | | | | | | | |
| L23 | 4 | 4 | 4:1 | 4 | B-C | C | 4 |
| 4 acre excavated borrow pit. | | | | | | | |
| L90 | 5 | 3 | 5:D5&LC | 4 | C-D | D | 5 |
| 2 acres of scrub shrub vegetation on the north side of and adjacent to Old Glacier Highway. | | | | | | | |
| L91 | 5 | 4 | 5:D5 | 4.5 | C-D | D | 5 |
| 2 acres of scrub shrub vegetation on the north side of Old Glacier Highway. | | | | | | | |

LOWER MENDENHALL RIVER: EAST SIDE AND AIRPORT VICINITY

| | | | | | | | |
|--|---|---|-----|-----|-----|----|------|
| M1 | 2 | 3 | 5:A | 4 | B-C | B | 7, 8 |
| Float plane pond south of and parallel to airport runway. Although the pond was stocked when the Salmon Creek Hatchery was closed, and trapping was conducted at two separate sites and times, no salmonids were found. The only development allowed would be in accordance with the federally approved FAA Airport Master Plan. The plan calls for no development south of the runway except for expansion of the float plane ponds. Strict application of the formula would have resulted in a Category C classification. However, the environmental values of the site and the significant public recreation use resulted in a Category B classification. | | | | | | | |
| M1A | 2 | 2 | 5:A | 3.5 | B-C | B | 8 |
| Long narrow pond adjacent to and south of float plane pond. No salmonids. Strict application of the formula would have resulted in a Category C classification. However, the environmental values of the site and the significant public recreation use resulted in a Category B classification. | | | | | | | |
| M1B | 2 | 2 | 5:A | 3.5 | B-C | B | 8 |
| Forested and scrub shrub wetland south of and adjacent to float plane pond. Strict application of the formula would have resulted in a Category C classification. However, the environmental values of the site and the significant public recreation use resulted in a Category B classification. | | | | | | | |
| M1C | 2 | 2 | 5:A | 3.5 | B-C | B | 8 |
| Canal south of and adjacent to the float plane pond. No salmonids. Strict application of the formula would have resulted in a Category C classification. However, the environmental values of the site and the significant public recreation use resulted in a Category B classification. | | | | | | | |
| M2 | 3 | 1 | 5:A | 3 | B-C | EP | 5,6 |
| 28 acre pond created by gravel pit excavation between east end of runway and Egan Drive. No salmonids are present. There is enhancement potential to create riparian environment and salmonid habitat. The steep sides of the pond might be graded to a gradual slope and the pond might be connected to saltwater of Gastineau Channel. | | | | | | | |

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

| | | | | | | | |
|----|---|---|------|---|-----|---|---|
| M3 | 2 | 2 | 4:RR | 3 | B-C | B | 5 |
|----|---|---|------|---|-----|---|---|

13 acres of emergent vegetation adjacent to Egan Drive and the gravel pit pond. Application of the formula allows limited use of best professional judgment. It is Category B by best professional judgment since there is potential for mitigation to enhance public appreciation of the area, especially in conjunction with enhancement of the pond.

| | | | | | | | |
|----|---|---|-----|---|-----|---|------|
| M4 | 2 | 3 | 5:A | 4 | B-C | C | 6, 8 |
|----|---|---|-----|---|-----|---|------|

This is a small pond adjacent to the north side of the runway and parallel taxiway. It is an attractive area for birds, which creates bird strike hazard conditions. The bird strike hazard is created because the pond is so close to the runway that it encourages birds to cross from one side of the runway to the other in a very low flight path. A portion of this pond was filled during construction of the Airport parallel taxiway.

| | | | | | | | |
|----|---|---|-----|---|-----|---|------|
| M5 | 2 | 3 | 5:A | 4 | B-C | A | 6, 8 |
|----|---|---|-----|---|-----|---|------|

3 acres between airport tie down area and fire crash station. Jordan Creek passes through the site, and the wetland unit has been the site of stream enhancement work as mitigation for construction of the parallel taxiway. For this reason, the wetland unit is classified as Category A.

| | | | | | | | |
|----|---|---|-----|---|-----|---|------|
| M6 | 4 | 5 | 5:A | 5 | B-C | C | 6, 8 |
|----|---|---|-----|---|-----|---|------|

4 acres adjacent to taxiway next to tie down area. This wetland was filled during construction of the Airport parallel taxiway.

| | | | | | | | |
|----|---|---|--------|---|-----|-----------|---------|
| M7 | 2 | 3 | 5:GC&A | 4 | B-C | B(S)&C(S) | 6, 7, 8 |
|----|---|---|--------|---|-----|-----------|---------|

12 emergent vegetation acres between the Airport and the back of Nugget Mall commercial area. The eastern portion is Category C; the western portion is Category B. Jordan Creek runs down the middle of this narrow wetland and is surrounded by a Category A stream corridor-(see Map Atlas). The eastern portion of the wetland is within the CBJ-owned Jordan Creek greenbelt.

| | | | | | | | |
|----|---|---|-----|---|-----|---|---------|
| M8 | 4 | 5 | 5:A | 5 | B-C | C | 6, 7, 8 |
|----|---|---|-----|---|-----|---|---------|

3 acres adjacent to Airport taxiway next to tie down area.

| | | | | | | | |
|----|---|---|-----|---|-----|---|------|
| M9 | 2 | 4 | 4:1 | 4 | B-C | C | 6, 8 |
|----|---|---|-----|---|-----|---|------|

5 acres of emergent vegetation on the east side of Crest Avenue.

| | | | | | | | |
|-----|---|---|-----|-----|-----|---|------|
| M10 | 4 | 5 | 4:1 | 4.5 | B-C | C | 6, 8 |
|-----|---|---|-----|-----|-----|---|------|

1 acre of emergent vegetation on the north side of and adjacent to Yandukin Drive.

| | | | | | | | |
|-----|---|---|------|---|-----|---|------|
| M13 | 4 | 5 | 5:GC | 5 | B-C | C | 6, 8 |
|-----|---|---|------|---|-----|---|------|

1 acre adjacent to Alpine Avenue.

| | | | | | | | |
|-----|---|---|----------------------|-----------|-----|---|---|
| M14 | 3 | 1 | 2&4&1:D10 &RR&D15 | 1.5&2.5&1 | B-C | B | 6 |
|-----|---|---|----------------------|-----------|-----|---|---|

3 acres of scrub shrub vegetation in a long narrow strip on the north side of and adjacent to Egan Drive, owned by the State of Alaska.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--|-----|----|-------------|-----------|------------------|---------------------|-------------------------|
| M15 | 4 | 4 | 5:A | 4.5 | B-C | C | 7 |
| Small scrub shrub wetland between Flight Service Center and airport plane access ramp. | | | | | | | |
| M17 | 4 | 4 | 5:LC | 4.5 | B-C | C | 7 |
| 2 acres of scrub shrub at the southeast corner of the intersection of Riverside and Egan Drives. | | | | | | | |
| M18 | 4 | 4 | 5:LC | 4.5 | B-C | C | 7 |
| 1 acre of emergent growth vegetation, owned by the State of Alaska, adjacent to the south side of Egan Drive in the vicinity of Mendenhall Mall. | | | | | | | |
| M19 | 2 | 2 | 5:LC | 3.5 | | Unclassified | 7 |
| Less than one acre, Duck Creek Greenbelt. | | | | | | | |
| M20 | 2 | 2 | 5:LC | 3.5 | | Unclassified | 7 |
| 1 acre, Duck Creek Greenbelt. | | | | | | | |
| M21 | 2 | 3 | 5:LC | 4 | | Unclassified | 7 |
| 2 acres, Puck Creek Greenbelt. | | | | | | | |
| M26 | 3 | 2 | 5&1 :D5&D15 | 3.5&1.5 | B-C | B | 5 |
| 5 acres of emergent vegetation between Old Glacier Highway and Egan Drive in the vicinity of the old dairy farm. | | | | | | | |
| M27 | 2 | 2 | 5:D5 | 3.5 | B-C | B | 5 |
| 6 emergent growth acres in a long narrow strip on the north side of and adjacent to Egan Drive east of the old dairy farm. | | | | | | | |
| M49 | 3 | 3 | 5:A | 4 | | C(S) | 7 |
| Duck Creek Greenbelt. Considered Category C, in the event this section of Duck Creek is relocated to the northern airport boundary. | | | | | | | |
| M50 | 4 | 4 | 5&1 :A&D15 | 4.5&2.S | B-C | C | 7 |
| 1 acre of scrub shrub vegetation west of Duck Creek. | | | | | | | |
| M51 | 2 | 3 | 5:A | 4 | | C(S) | 7, 8 |
| Duck Creek Greenbelt. Considered Category C, in the event this section of Duck Creek-is relocated to the northern airport boundary. | | | | | | | |
| M52 | 4 | 3 | 5:GC&A | 4 | B-C | C | 7, 8 |
| Small area of emergent vegetation northwest of the end of the Airport runway. | | | | | | | |
| M53 | 2 | 3 | 5:A | 4 | | C(S) | 7, 8 |
| Duck Creek Greenbelt, at the west end of the Airport runway. Considered Category C, in the event this section of Duck Creek is relocated to the northern airport boundary. | | | | | | | |

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

LOWER MONTANA CREEK

| | | | | | | | |
|-----|---|---|---------|-----|-----|---|--------|
| ML1 | 1 | 1 | 4:D1/D5 | 2.5 | A-B | A | 17, 18 |
|-----|---|---|---------|-----|-----|---|--------|

245 acres in a large patterned fen traversed by Montana Creek to the west side of the fen. Although it might seem that the fen recharges Montana Creek, or discharges into an aquifer, the Siegel hydrological study (August 1988) determined that there is very little hydrological connection between the fen and Montana Creek or an aquifer. It also found that the wetland has a very low value for groundwater discharge. However, it has a high value for most other evaluated functions.

| | | | | | | | |
|-----|---|---|---------|---|-----|---|----|
| ML2 | 4 | 2 | 4:D1/D5 | 3 | B-C | C | 18 |
|-----|---|---|---------|---|-----|---|----|

1 isolated inaccessible acre of scrub shrub. The formula allows limited use of best professional judgment for this wetland. It is Category C by best professional judgment because the site was determined to be a "potential future disposal site" by the Corps/EPA Advanced Identification.

| | | | | | | | |
|------|---|---|---------|-----|-----|--|----|
| ML15 | 2 | 1 | 4:D1/D5 | 2.5 | CBJ | | 17 |
|------|---|---|---------|-----|-----|--|----|

Unclassified

A small isolated strip within the CBJ-owned Mendenhall River greenbelt.

| | | | | | | | |
|------|---|---|---------|---|-----|------|----|
| ML16 | 1 | 2 | 4:D1/D5 | 3 | A-B | B(R) | 22 |
|------|---|---|---------|---|-----|------|----|

8 acres in a narrow northeast/southwest orientation between Back Loop Road and Skaters Cabin Road. The formula allows limited use of best professional judgment for this wetland. It was designated Category B because there are relatively few practicable alternatives for development in this zoning district, and there are adjacent subdivisions and infrastructure. Several residential lots are in a Category C residential road corridor (see Map Atlas).

| | | | | | | | |
|------|---|---|---------|---|-----|---|----|
| ML17 | 4 | 2 | 4:D1/D5 | 3 | B-C | C | 14 |
|------|---|---|---------|---|-----|---|----|

2 acres of isolated inaccessible forest wetland. The formula allows limited use of best professional judgment for this wetland. It is Category C by best professional judgment because the site was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|------|---|---|---------|---|-----|---|------------|
| ML19 | 2 | 2 | 4:D1/D5 | 3 | B-C | B | 17, 18, 22 |
|------|---|---|---------|---|-----|---|------------|

1 acre pond between the patterned fen and Back Loop Road. The formula allows limited use of best professional judgment for this wetland. It is Category B by best professional judgment because of its relatively high score for human use support.

MENDENHALL RIVER: ADJACENT TO OLD GLACIER HIGHWAY

| | | | | | | | |
|-----|---|---|-----|-----|-----|-----|---|
| MW1 | 2 | 3 | 4:1 | 3.5 | B-C | A&B | 9 |
|-----|---|---|-----|-----|-----|-----|---|

22 acres of emergent vegetation west of the south terminus of Old Industrial Blvd. The Corps of Engineers required that a portion of the wetland unit, adjacent to Industrial Blvd., be restored as a wetland as mitigation for adjacent fills. This restored wetland area is designated Category A (see Map Atlas). The remainder of the wetland unit is Category B. Wetland unit MW1 is currently used for recreational purposes by the Mendenhall Golf Course.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

| | | | | | | | |
|-----|---|---|----------|---|-----|------|-------|
| MW2 | 1 | 2 | 4I&D1/D5 | 3 | A-B | B(S) | 9, 10 |
|-----|---|---|----------|---|-----|------|-------|

Approximately 70 acres of emergent vegetation from the industrial developed land on the east all the way to Mendenhall Peninsula on the west. Two anadromous fish streams meander through the wetland unit (Pederson Hill Creek and Casa del Sol Creek). Application of the formula allows limited use of best professional judgment for this wetland. The wetland is designated Category B, with Category A stream corridors (see Map Atlas). The Category B designation was given since there are few practicable alternatives for development in this zoning district and because there is developed access nearby. Wetland unit MW2 is currently used for recreational purposes by the Mendenhall Golf Course.

| | | | | | | | |
|-----|---|---|----------|-----|-----|--------|---|
| MW3 | 1 | 3 | 4I&D1/D3 | 3.5 | A-B | B(S)&C | 9 |
|-----|---|---|----------|-----|-----|--------|---|

23 acres of emergent vegetation in a north/south orientation as far north as Old Glacier Highway. An anadromous fish stream meanders in the wetland unit. The stream corridor is Category A (see Map Atlas). The far eastern portion of the wetland unit (approximately 1.5 acres), adjacent to the developed Industrial Blvd. corridor, is Category C (see Map Atlas).

| | | | | | | | |
|------|---|---|-----|-----|-----|---|---|
| MW3A | 2 | 3 | 4:1 | 3.5 | B-C | B | 9 |
|------|---|---|-----|-----|-----|---|---|

8 acres of emergent vegetation in a relatively narrow rectangle oriented in an east/west direction, west of Crazy Horse Drive. Strict application of the formula would have resulted in a Category C designation. However, the wetland unit was designated Category B due to its adjacency to higher value undeveloped wetlands and an anadromous fish stream (Casa del Sol Creek).

| | | | | | | | |
|-----|---|---|-----|---|-----|---|---|
| MW4 | 2 | 4 | 4:1 | 4 | B-C | B | 9 |
|-----|---|---|-----|---|-----|---|---|

13 acres of emergent vegetation in a rectangular shape, occupying an old sludge disposal site adjacent to industrially developed land. Strict application of the formula would have resulted in a Category C designation. However, the wetland unit was designated Category B due to its adjacency to other higher value undeveloped wetlands.

| | | | | | | | |
|-----|---|---|-----|-----|-----|-----|---|
| MW5 | 3 | 3 | 4:1 | 3.5 | B-C | B&C | 9 |
|-----|---|---|-----|-----|-----|-----|---|

20 acres of scrub shrub vegetation and forested wetlands. The eastern portion of the wetland unit (approximately 6.5 acres) adjacent to the developed Industrial Blvd. corridor is designated Category C (see Map Atlas). The remainder of the wetland unit is Category B.

| | | | | | | | |
|-----|---|---|---------|---|-----|---|----------|
| MW6 | 2 | 2 | 4:D1/D5 | 3 | B-C | B | 7, 9, 14 |
|-----|---|---|---------|---|-----|---|----------|

40 acres of emergent vegetation, a large portion of which is in CBJ-owned Brotherhood Park. Application of the formula allows limited use of best professional judgment. The wetland unit is designated as Category B by best professional judgment due to its relatively high wetland values and the fact that a portion of the wetland is in CBJ park land.

| | | | | | | | |
|-----|---|---|---------|-----|-----|---|----|
| MW9 | 4 | 3 | 4:D1/D5 | 3.5 | B-C | C | 14 |
|-----|---|---|---------|-----|-----|---|----|

1 acre of isolated scrub shrub wetland north of Old Glacier Highway.

| | | | | | | | |
|------|---|---|---------|---|-----|---------|-----------|
| MW11 | 2 | 2 | 4:D1/D3 | 3 | B-C | B(R)(S) | 9, 10, 14 |
|------|---|---|---------|---|-----|---------|-----------|

54 acres of forested wetland on Mendenhall Peninsula. Application of the formula allows limited use of best professional judgment. The east boundary along Engineer's Cutoff is in a Category C residential road corridor, except for a portion within a Category A stream buffer (see Map Atlas). The rest of the wetland is Category B.

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
| MW12 | 5 | 1 | 4:RR | 2.5 | C-D | C | 10, 12 |
| MW13 | 4 | 1 | 4:RR | 2.5 | B-C | C | 11, 12 |
| MW14 | 4 | 1 | 4:RR | 2.5 | B-C | C | 11 |
| MW15 | 4 | 1 | 4:RR | 2.5 | B-C | C | 12 |
| MW16 | 4 | 1 | 4:RR | 2.5 | B-C | C | 11 |

These Designated Important Wetland Management Categories are isolated inaccessible parcels on the ridge of Mendenhall Peninsula. The units are designated Category C since they were determined to be "potential future disposal sites" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|------|---|---|------|---|-----|---|----|
| MW17 | 2 | 1 | 5:D5 | 3 | B-C | C | 13 |
|------|---|---|------|---|-----|---|----|

3 acre former dredge site that has been filled and graded. This wetland unit is part of the CBJ-owned land reserved for future development of Diamond City Park. The unit appears to no longer have wetland characteristics, due to past development/grading impacts.

| | | | | | | | |
|------|---|---|----------|-----|-----|---|----|
| MW18 | 3 | 3 | 4:D1/D10 | 3.5 | B-C | C | 14 |
|------|---|---|----------|-----|-----|---|----|

Small isolated forested wetland adjacent to Old Glacier Highway, north of the Engineer's Cutoff intersection.

| | | | | | | | |
|------|---|---|--------------------|-----|-----|---|----|
| MW19 | 5 | 3 | 4:D1/D5& D1/D10 | 3.5 | C-D | D | 14 |
|------|---|---|--------------------|-----|-----|---|----|

4 acres of isolated scrub shrub vegetation, north of Old Glacier Highway and north of the Engineer's Cutoff intersection.

| | | | | | | | |
|------|---|---|---------|---|-----|------|---|
| MW20 | 2 | 2 | 4:D1/D3 | 3 | B-C | B(S) | 9 |
|------|---|---|---------|---|-----|------|---|

1 acre of scrub shrub vegetation adjacent to Engineer's Cutoff on the east side. Most of MW 20 is in a Category A stream buffer for an unnamed anadromous fish stream (see Map Atlas). The formula allows limited use of best professional judgment for this wetland. It is designated Category B because of the presence of the fish stream.

| | | | | | | | |
|------|---|---|--------------------|---|-----|------|-------|
| MW21 | 1 | 2 | 4:D1/D5& D1/D10 | 3 | A-B | B(S) | 9, 14 |
|------|---|---|--------------------|---|-----|------|-------|

30 acres of emergent vegetation adjacent to Brotherhood Park north of Old Glacier Highway. The west half contains small tributaries of an unnamed anadromous fish stream, which is bordered by a Category A stream corridor (see Map Atlas). The east portion is part of CBJ-owned Brotherhood Park. The formula allows limited use of best professional judgment for this wetland. The wetland is designated Category B because there are relatively few practicable alternatives for development in this zoning district, and because there is good access and infrastructure.

| | | | | | | | |
|------|---|---|----------------------|-----|-----|------|---|
| MW22 | 2 | 3 | 4:D1/D10& D1/D3&I | 3.5 | B-C | C(S) | 9 |
|------|---|---|----------------------|-----|-----|------|---|

1 acre of forested wetland southwest of Sherwood Lane. An unnamed anadromous fish stream flows through the wetland and is protected by a Category A stream corridor (See Map Atlas).

IMPORTANT WETLAND HABITAT MANAGEMENT DESIGNATIONS

| WETLAND UNIT | WET | PP | PA Zone | (PA+PP)/2 | Management Range | Management Category | Wetlands Map Atlas Page |
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|
|--------------|-----|----|---------|-----------|------------------|---------------------|-------------------------|

| | | | | | | | |
|------|---|---|-----|---|-----|---|---|
| MW23 | 4 | 4 | 4:1 | 4 | B-C | C | 7 |
|------|---|---|-----|---|-----|---|---|

1 acre of scrub shrub vegetation near the Mendenhall River.

| | | | | | | | |
|------|---|---|------|-----|-----|---|----|
| MW25 | 3 | 1 | 4:RR | 2.5 | B-C | B | 10 |
|------|---|---|------|-----|-----|---|----|

1 isolated acre of scrub shrub vegetation at the east edge of the Mendenhall Peninsula.

| | | | | | | | |
|------|---|---|-----------|---|-----|------|---|
| MW30 | 2 | 2 | 4:D1/D3&I | 3 | B-C | B(S) | 9 |
|------|---|---|-----------|---|-----|------|---|

Approximately 10 acres of scrub shrub vegetation and forest in a north/south orientation, adjacent to Mendenhall Peninsula, bisected by an unnamed anadromous fish stream. The stream is protected by a Category A stream corridor (see Map Atlas). Application of the formula allows limited use of best professional judgment for this wetland. It is designated Category B by best professional judgment because of its support of the anadromous fish stream.

| | | | | | | | |
|------|---|---|-----|-----|-----|---|---|
| MW60 | 4 | 5 | 4:1 | 4.5 | B-C | C | 9 |
|------|---|---|-----|-----|-----|---|---|

5 forested acres in the middle of industrially developed land, north of Bentwood Place.

UPPER MONTANA CREEK

| | | | | | | | |
|-----|---|---|------------|-----|-----|-----|------------|
| UM1 | 1 | 1 | 4:D1/D5&RR | 2.5 | A-B | A&C | 18, 22, 23 |
|-----|---|---|------------|-----|-----|-----|------------|

218 acres composed several smaller Designated Important Wetland Management Categories delineated by the Corps of Engineers. Montana Creek runs north/south along the western boundary of the wetland unit. The south boundary is the Back Loop Road. The forested eastern segment along Montana Creek Road (approximately 25 acres) is Category C (see Map Atlas). The remainder of the wetland unit is Category A.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| UM6 | 2 | 1 | 4:RR | 2.5 | B-C | B | 23 |
|-----|---|---|------|-----|-----|---|----|

9 acres adjacent to and on the northeast side of Montana Creek Road.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| UM7 | 3 | 1 | 4:RR | 2.5 | B-C | B | 23 |
|-----|---|---|------|-----|-----|---|----|

13 isolated inaccessible forested acres.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| UM8 | 2 | 1 | 4:RR | 2.5 | B-C | C | 23 |
|-----|---|---|------|-----|-----|---|----|

7 isolated inaccessible forested acres. Designated Category C because it was determined to be a "potential future disposal site" in the Corps/EPA Advanced Identification.

| | | | | | | | |
|-----|---|---|------|-----|-----|---|----|
| UM9 | 2 | 1 | 4:RR | 2.5 | B-C | B | 23 |
|-----|---|---|------|-----|-----|---|----|

87 acres of scrub shrub and forest vegetation adjacent to and on the north side of Montana Creek Road.

| | | | | | | | |
|------|---|---|------|-----|-----|---|----|
| UM10 | 2 | 1 | 4:RR | 2.5 | B-C | B | 23 |
|------|---|---|------|-----|-----|---|----|

6 acres of scrub shrub and forest vegetation adjacent to and on the south side of Montana Creek Road.

| | | | | | | | |
|------|---|---|------|-----|-----|---|----|
| UM11 | 2 | 1 | 4:RR | 2.5 | B-C | B | 23 |
|------|---|---|------|-----|-----|---|----|

5 acres of forested wetland adjacent to and on the south side of Montana Creek Road.

APPENDIX II-E ENVIRONMENTAL FUNCTIONS OF IMPORTANT WETLAND HABITAT DESIGNATIONS

This Appendix lists the environmental functions of each Designated Important Wetland Habitat Management unit, as determined through the Adamus WET technique. For each Designated Important Wetland Habitat Management unit, the table indicates whether the function was rated from Very Low (VL) to Very High (VH) by the Adamus method. The table also gives the consolidated score for each Designated Important Wetland Habitat Management unit for Aquatic Habitat support, Human Use support, and Terrestrial Habitat support.

The methodology used to derive the Adamus WET scores, and the consolidated scores, is described in Chapter II, Classification Methodology. Additional information regarding each Designated Important Wetland Habitat Management unit, and the Adamus WET results, can be found in Juneau Wetlands Management Plan Map Appendix (May 1994).

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| WETLAND UNIT | GROUNDWATER DISCHARGE | GROUNDWATER RECHARGE | SURFACE HYDROLOGIC CONTROL | SEDIMENT/ TOXICANT RETENTION | NUTRIENT EXPORT | RIPARIAN SUPPORT | EROSION SENSITIVITY | SALMONID HABITAT |
|--------------|-----------------------|----------------------|----------------------------|------------------------------|-----------------|------------------|---------------------|------------------|
|--------------|-----------------------|----------------------|----------------------------|------------------------------|-----------------|------------------|---------------------|------------------|

AUKE BAY

| | | | | | | | | |
|-----|---|---|----|----|---|----|----|----|
| A1 | L | M | H | ML | L | L | H | VL |
| A2 | L | L | H | MH | M | H | MH | VH |
| A5 | L | M | H | ML | M | MH | H | H |
| A5A | L | L | L | L | L | L | H | VL |
| A5B | L | L | L | L | L | L | MH | VL |
| A6 | M | L | ML | ML | M | MH | L | VL |
| A7 | L | M | H | ML | M | MH | H | L |
| A8 | L | M | H | ML | L | L | H | VL |
| A9 | L | L | MH | ML | L | L | ML | VL |
| A10 | L | M | MH | ML | M | MH | ML | VL |
| A11 | M | L | H | ML | M | MH | H | MH |
| A12 | L | L | L | L | L | L | ML | VL |
| A13 | L | L | MH | ML | L | L | ML | VL |
| A14 | L | L | MH | ML | L | ML | ML | VL |
| A15 | M | L | L | L | L | ML | H | VL |
| A17 | L | L | MH | ML | L | L | MH | VL |
| A19 | L | L | MH | ML | L | L | MH | VL |

DUCK CREEK

| | | | | | | | | |
|-----|---|---|----|----|---|----|----|----|
| D2 | M | L | H | MH | H | MH | ML | MH |
| D3 | M | L | H | H | H | MH | ML | MH |
| D4 | L | L | MH | MH | H | MH | ML | MH |
| D5 | L | L | MH | MH | L | MH | ML | MH |
| D6 | L | L | MH | H | H | MH | ML | MH |
| D7 | L | L | MH | H | H | MH | ML | MH |
| D8 | L | L | MH | H | L | MH | ML | MH |
| D11 | L | L | H | H | L | L | L | VL |

DOUGLAS ISLAND: EAST OF FISH CREEK

| | | | | | | | | |
|------|---|---|----|----|---|----|----|----|
| DE1 | L | L | H | H | M | MH | ML | VL |
| DE2 | L | M | MH | ML | M | MH | MH | L |
| DE3 | L | M | H | ML | M | H | ML | L |
| DE4 | L | M | H | ML | M | MH | ML | H |
| DE5 | M | L | ML | ML | L | L | MH | VL |
| DE7 | L | L | L | L | M | H | ML | H |
| DE8 | L | M | MH | ML | L | L | MH | VL |
| DE9 | L | M | MH | ML | L | MH | ML | VL |
| DE10 | L | L | MH | ML | L | MH | ML | VL |

DOUGLAS ISLAND: WEST OF FISH CREEK

| | | | | | | | | |
|-----|---|---|----|----|---|----|----|----|
| DW2 | L | H | H | H | M | MH | L | ML |
| DW3 | L | L | MH | ML | L | L | ML | VL |
| DW4 | L | M | L | L | L | L | ML | VL |
| DW5 | L | M | L | L | L | L | L | VL |
| DW6 | L | L | ML | ML | L | L | MH | VL |
| DW7 | L | H | H | H | L | ML | L | VL |

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| DISTURBANCE SENSITIVE WILDLIFE | REGIONAL ECOLOGICAL DIVERSITY | ECOLOGICAL REPLACEMENT COST | RECREATION USE/ POTENTIAL | RECREATION USE/ ACTUAL | DOWNSLOPE BENEFICIARY SITES | HUMAN USE SUPPORT | AQUATIC USE SUPPORT | TERRESTRIAL USE SUPPORT |
|--------------------------------|-------------------------------|-----------------------------|---------------------------|------------------------|-----------------------------|-------------------|---------------------|-------------------------|
|--------------------------------|-------------------------------|-----------------------------|---------------------------|------------------------|-----------------------------|-------------------|---------------------|-------------------------|

| | | | | | | | | |
|----|----|---|----|----|---|----|----|----|
| L | L | H | L | L | L | 32 | 23 | 19 |
| H | H | L | H | H | L | 37 | 46 | 56 |
| ML | MH | H | ML | ML | H | 42 | 40 | 36 |
| L | L | M | ML | ML | H | 29 | 22 | 19 |
| L | L | M | ML | ML | H | 29 | 20 | 19 |
| ML | H | M | ML | ML | L | 23 | 28 | 40 |
| ML | MH | H | ML | ML | M | 39 | 33 | 37 |
| L | ML | M | ML | ML | L | 35 | 23 | 23 |
| L | MH | H | MH | ML | M | 35 | 18 | 31 |
| ML | MH | H | ML | ML | H | 41 | 27 | 37 |
| ML | MH | H | ML | ML | H | 38 | 42 | 37 |
| L | MH | H | ML | ML | H | 29 | 18 | 32 |
| L | MH | H | ML | ML | H | 36 | 19 | 32 |
| L | L | H | ML | ML | L | 27 | 21 | 19 |
| L | MH | L | ML | ML | L | 21 | 27 | 32 |
| L | L | M | MH | ML | L | 30 | 21 | 18 |
| L | L | M | ML | ML | L | 28 | 21 | 18 |

| | | | | | | | | |
|---|----|---|----|----|---|----|----|----|
| L | L | L | MH | ML | H | 41 | 42 | 18 |
| L | L | L | MH | ML | H | 41 | 43 | 18 |
| L | L | L | MH | ML | H | 39 | 39 | 18 |
| L | L | L | MH | ML | H | 39 | 34 | 18 |
| L | L | L | MH | ML | H | 39 | 40 | 18 |
| L | L | L | MH | ML | H | 39 | 40 | 18 |
| L | MH | L | MH | ML | H | 39 | 35 | 31 |
| L | L | L | MH | ML | M | 37 | 20 | 18 |

| | | | | | | | | |
|----|----|----|----|----|---|----|----|----|
| H | ML | H | H | MH | L | 37 | 30 | 41 |
| H | MH | MH | H | MH | L | 38 | 31 | 50 |
| H | H | M | H | MH | L | 40 | 30 | 54 |
| MH | H | H | H | MH | L | 40 | 36 | 49 |
| L | L | L | L | L | L | 21 | 25 | 19 |
| ML | MH | L | MH | MH | L | 26 | 37 | 36 |
| MH | ML | MH | L | L | L | 30 | 22 | 37 |
| MH | MH | M | MH | MH | L | 37 | 24 | 45 |
| MH | MH | H | MH | MH | L | 33 | 24 | 45 |

| | | | | | | | | |
|----|----|---|---|----|---|----|----|----|
| MH | MH | H | H | MH | L | 44 | 32 | 45 |
| ML | MH | H | L | L | L | 25 | 19 | 37 |
| ML | ML | M | L | L | L | 24 | 18 | 28 |
| L | L | M | L | L | L | 24 | 17 | 19 |
| ML | MH | M | L | L | L | 21 | 22 | 37 |
| L | MH | H | H | MH | L | 44 | 22 | 31 |

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| WETLAND UNIT | GROUNDWATER DISCHARGE | GROUNDWATER RECHARGE | SURFACE HYDROLOGIC CONTROL | SEDIMENT/ TOXICANT RETENTION | NUTRIENT EXPORT | RIPARIAN SUPPORT | EROSION SENSITIVITY | SALMONID HABITAT |
|--------------|-----------------------|----------------------|----------------------------|------------------------------|-----------------|------------------|---------------------|------------------|
| DW8 | L | M | MH | H | M | MH | ML | VL |
| DW9 | L | M | H | H | M | MH | L | VL |
| DW11 | L | L | L | L | L | ML | MH | VL |
| DW12 | L | L | H | H | L | L | L | VL |
| DW13 | L | L | H | H | L | L | L | VL |
| DW15 | L | L | MH | H | M | H | L | VL |
| DW16 | L | L | MH | H | M | H | L | ML |
| DW17 | L | L | L | H | L | H | H | MH |
| DW18 | L | L | H | H | L | ML | H | VL |

JORDAN CREEK

| | | | | | | | | |
|----|---|---|----|----|---|----|----|----|
| J1 | H | L | H | L | H | H | ML | VL |
| J2 | H | L | H | L | H | H | M | H |
| J3 | H | L | MH | ML | L | H | M | VH |
| J4 | H | L | MH | MH | H | H | L | VH |
| J5 | H | L | MH | MH | H | H | L | H |
| J6 | H | L | MH | ML | H | H | L | H |
| J7 | M | L | H | H | H | ML | L | VL |

LEMON CREEK

| | | | | | | | | |
|-----|---|---|----|----|---|----|----|----|
| L1 | M | L | ML | H | L | MH | L | MH |
| L4 | L | L | H | H | M | H | L | H |
| L5 | L | L | H | H | L | L | H | VL |
| L6 | M | L | ML | H | H | H | H | VH |
| L7 | L | L | H | H | L | L | H | VL |
| L7A | L | L | H | H | L | L | H | VL |
| L8 | M | L | L | H | M | H | MH | H |
| L12 | M | L | MH | H | H | H | L | VH |
| L13 | L | L | MH | H | H | H | L | L |
| L14 | M | L | ML | H | H | H | L | H |
| L15 | L | L | MH | ML | M | MH | MH | ML |
| L17 | L | L | H | H | L | L | L | VL |
| L18 | M | L | ML | MH | M | ML | MH | L |
| L20 | L | L | H | H | L | L | H | VL |
| L21 | L | L | H | H | L | L | H | VL |
| L22 | L | L | H | H | L | L | H | VL |
| L23 | L | L | H | H | L | L | H | VL |
| L90 | M | L | L | ML | L | ML | MH | L |
| L91 | M | L | L | ML | L | ML | ML | L |

LOWER MENDENHALL RIVER: EAST SIDE AND AIRPORT VICINITY

| | | | | | | | | |
|-----|---|---|----|----|---|----|---|----|
| M1 | L | L | L | H | H | H | H | L |
| M1A | L | L | MH | H | H | H | L | L |
| M1B | L | L | ML | MH | H | H | L | VL |
| M1C | L | L | ML | MH | H | H | L | L |
| M2 | L | L | H | MH | L | ML | H | L |
| M3 | L | L | MH | H | M | ML | M | L |
| M4 | L | L | MH | H | H | H | L | H |

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| DISTURBANCE SENSITIVE WILDLIFE | REGIONAL ECOLOGICAL DIVERSITY | ECOLOGICAL REPLACEMENT COST | RECREATION USE/ POTENTIAL | RECREATION USE/ ACTUAL | DOWNSLOPE BENEFICIARY SITES | HUMAN USE SUPPORT | AQUATIC USE SUPPORT | TERRESTRIAL USE SUPPORT |
|--------------------------------|-------------------------------|-----------------------------|---------------------------|------------------------|-----------------------------|-------------------|---------------------|-------------------------|
| ML | H | H | H | MH | L | 38 | 30 | 40 |
| H | ML | M | L | L | H | 40 | 28 | 41 |
| ML | ML | M | L | L | L | 19 | 22 | 28 |
| L | L | H | MH | MH | L | 35 | 21 | 19 |
| L | L | H | L | L | L | 27 | 21 | 19 |
| ML | MH | M | MH | MH | L | 33 | 30 | 36 |
| H | H | L | MH | MH | L | 33 | 34 | 54 |
| H | ML | L | MH | MH | L | 26 | 41 | 41 |
| H | L | L | MH | MH | L | 35 | 27 | 37 |

| | | | | | | | | |
|----|----|---|----|----|---|----|----|----|
| L | L | M | L | L | H | 35 | 37 | 19 |
| ML | H | H | L | L | H | 35 | 49 | 41 |
| MH | H | M | H | ML | H | 40 | 45 | 49 |
| H | MH | H | L | L | H | 34 | 50 | 50 |
| MH | H | H | H | ML | H | 40 | 48 | 49 |
| ML | MH | H | L | L | H | 33 | 47 | 37 |
| MH | H | M | MH | ML | H | 41 | 30 | 49 |

| | | | | | | | | |
|----|----|---|----|----|---|----|----|----|
| ML | L | L | ML | ML | M | 28 | 37 | 23 |
| L | H | L | MH | ML | M | 36 | 41 | 36 |
| H | L | L | MH | ML | M | 36 | 26 | 38 |
| H | H | H | L | L | M | 25 | 53 | 54 |
| L | L | L | MH | L | M | 35 | 26 | 19 |
| L | L | L | MH | L | M | 35 | 26 | 19 |
| H | H | L | ML | ML | M | 25 | 47 | 54 |
| ML | ML | L | MH | ML | M | 35 | 48 | 27 |
| ML | MH | L | ML | ML | M | 32 | 35 | 36 |
| ML | ML | L | MH | ML | M | 30 | 47 | 28 |
| ML | MH | L | MH | ML | L | 30 | 34 | 37 |
| L | L | L | MH | ML | M | 37 | 20 | 18 |
| MH | H | L | ML | ML | M | 27 | 34 | 51 |
| MH | H | L | ML | L | M | 32 | 26 | 51 |
| MH | H | L | ML | L | M | 32 | 26 | 51 |
| L | L | L | ML | L | M | 32 | 26 | 19 |
| L | L | L | ML | L | M | 32 | 26 | 19 |
| L | L | M | ML | ML | L | 21 | 28 | 18 |
| L | L | L | ML | ML | L | 21 | 26 | 19 |

| | | | | | | | | |
|----|----|---|----|----|---|----|----|----|
| MH | H | L | ML | ML | M | 25 | 41 | 41 |
| MH | MH | L | ML | ML | L | 27 | 36 | 37 |
| H | H | L | ML | ML | L | 23 | 32 | 56 |
| MH | H | L | ML | ML | L | 23 | 35 | 51 |
| H | L | L | ML | ML | L | 29 | 29 | 38 |
| ML | H | L | MH | ML | M | 34 | 30 | 41 |
| H | L | L | MH | ML | M | 34 | 44 | 38 |

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| WETLAND UNIT | GROUNDWATER DISCHARGE | GROUNDWATER RECHARGE | SURFACE HYDROLOGIC CONTROL | SEDIMENT/ TOXICANT RETENTION | NUTRIENT EXPORT | RIPARIAN SUPPORT | EROSION SENSITIVITY | SALMONID HABITAT |
|--------------|-----------------------|----------------------|----------------------------|------------------------------|-----------------|------------------|---------------------|------------------|
| M5 | L | L | MH | H | H | MH | - | H |
| M6 | L | L | H | H | L | L | L | VL |
| M7 | M | L | MH | H | L | MH | L | H |
| M8 | L | L | H | H | L | L | L | VL |
| M9 | L | L | H | H | M | L | L | VL |
| M10 | L | L | MH | H | M | L | L | VL |
| M13 | L | L | H | MH | L | L | L | VL |
| M14 | H | L | H | H | M | ML | L | MH |
| M15 | L | L | MH | H | M | MH | L | VL |
| M17 | L | L | H | H | L | L | L | VL |
| M18 | L | L | H | H | L | L | L | VL |
| M19 | H | L | MH | MH | L | MH | M | MH |
| M20 | H | L | MH | MH | H | MH | M | MH |
| M21 | M | L | MH | MH | H | MH | M | MH |
| M26 | M | L | H | H | L | ML | L | L |
| M27 | M | L | MH | H | M | ML | L | ML |
| M49 | L | L | MH | H | H | MH | L | MH |
| M50 | L | L | H | MH | M | L | L | VL |
| M51 | L | L | MH | H | H | MH | M | MH |
| M52 | L | L | H | H | L | MH | L | VL |
| M53 | L | L | MH | H | H | MH | M | MH |

LOWER MONTANA CREEK

| | | | | | | | | |
|------|---|---|----|----|----|----|----|----|
| ML1 | L | H | H | H | H | H | L | H |
| ML2 | M | L | ML | H | M | ML | L | VL |
| ML15 | L | L | ML | MH | H | H | L | L |
| ML16 | M | L | ML | ML | H | H | MH | MH |
| ML17 | L | L | L | L | ML | L | H | VL |
| ML19 | L | L | H | H | L | L | L | VL |

MENDENHALL RIVER: ADJACENT TO OLD GLACIER HIGHWAY

| | | | | | | | | |
|------|---|---|----|----|---|----|----|----|
| MW1 | L | L | ML | H | M | H | L | VL |
| MW2 | L | L | ML | H | H | H | L | VH |
| MW3 | L | L | ML | H | H | H | L | H |
| MW3A | L | L | H | ML | H | ML | L | VL |
| MW4 | L | L | H | ML | L | L | L | VL |
| MW5 | L | L | ML | ML | H | H | L | VL |
| MW6 | M | L | H | ML | H | H | L | VL |
| MW9 | M | L | H | ML | M | MH | MH | VL |
| MW11 | L | H | H | ML | H | MH | H | MH |
| MW12 | L | M | L | L | L | L | ML | VL |
| MW13 | L | H | H | ML | L | L | ML | VL |
| MW14 | L | H | MH | L | L | L | ML | VL |
| MW15 | L | H | MH | L | L | L | ML | VL |
| MW16 | L | H | MH | L | L | L | ML | VL |
| MW17 | L | L | H | H | L | ML | L | VL |
| MW18 | L | L | MH | ML | H | H | ML | VL |
| MW19 | L | L | L | ML | L | L | ML | VL |

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| DISTURBANCE SENSITIVE WILDLIFE | REGIONAL ECOLOGICAL DIVERSITY | ECOLOGICAL REPLACEMENT COST | RECREATION USE/ POTENTIAL | RECREATION USE/ ACTUAL | DOWNSLOPE BENEFICIARY SITES | HUMAN USE SUPPORT | AQUATIC USE SUPPORT | TERRESTRIAL USE SUPPORT |
|--------------------------------|-------------------------------|-----------------------------|---------------------------|------------------------|-----------------------------|-------------------|---------------------|-------------------------|
| ML | H | L | MH | ML | M | 35 | 41 | 40 |
| L | L | L | MH | ML | M | 36 | 21 | 19 |
| L | MH | L | MH | ML | M | 35 | 39 | 31 |
| L | L | L | MH | ML | M | 36 | 21 | 19 |
| MH | H | L | MH | ML | M | 37 | 23 | 49 |
| L | L | L | MH | ML | M | 35 | 23 | 18 |
| L | L | L | MH | ML | M | 37 | 19 | 18 |
| L | L | L | ML | ML | M | 34 | 39 | 18 |
| L | L | L | ML | ML | M | 32 | 28 | 18 |
| L | L | L | MH | ML | H | 41 | 20 | 18 |
| L | L | L | MH | ML | H | 41 | 20 | 18 |
| L | ML | L | MH | ML | H | 39 | 42 | 22 |
| L | MH | L | MH | ML | H | 39 | 47 | 31 |
| L | MH | L | MH | ML | H | 39 | 43 | 31 |
| L | ML | L | ML | ML | M | 34 | 27 | 22 |
| L | H | L | ML | ML | M | 32 | 32 | 35 |
| L | L | L | ML | ML | M | 32 | 39 | 18 |
| L | L | L | MH | ML | M | 37 | 22 | 18 |
| MH | L | L | ML | L | M | 30 | 42 | 33 |
| L | L | L | ML | L | M | 33 | 26 | 18 |
| L | H | L | ML | L | M | 30 | 42 | 36 |

| | | | | | | | | |
|----|---|---|----|----|---|----|----|----|
| MH | H | H | H | ML | H | 50 | 43 | 49 |
| L | L | L | L | L | H | 29 | 29 | 19 |
| ML | H | L | ML | ML | H | 32 | 35 | 41 |
| H | H | H | H | MH | H | 39 | 44 | 54 |
| L | L | M | L | L | H | 27 | 23 | 19 |
| MH | L | L | H | MH | H | 46 | 20 | 32 |

| | | | | | | | | |
|----|----|----|----|----|---|----|----|----|
| H | H | L | ML | ML | M | 25 | 28 | 56 |
| H | H | L | ML | ML | M | 27 | 46 | 56 |
| H | H | L | ML | ML | M | 28 | 43 | 54 |
| L | H | L | MH | MH | M | 39 | 25 | 36 |
| MH | H | L | MH | MH | M | 39 | 18 | 51 |
| L | H | ML | ML | ML | M | 28 | 29 | 35 |
| MH | H | L | H | H | L | 38 | 33 | 49 |
| L | L | M | ML | ML | L | 29 | 33 | 19 |
| MH | ML | H | ML | ML | L | 37 | 41 | 36 |
| L | L | M | L | L | L | 24 | 18 | 19 |
| L | L | H | L | L | L | 37 | 19 | 19 |
| L | L | H | L | L | L | 35 | 18 | 19 |
| L | L | H | L | L | L | 35 | 18 | 19 |
| L | L | H | L | L | L | 35 | 18 | 19 |
| H | L | L | MH | MH | H | 43 | 23 | 38 |
| L | L | M | MH | MH | M | 37 | 32 | 19 |
| L | L | M | ML | ML | L | 21 | 19 | 19 |

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| WETLAND UNIT | GROUNDWATER DISCHARGE | GROUNDWATER RECHARGE | SURFACE HYDROLOGIC CONTROL | SEDIMENT/ TOXICANT RETENTION | NUTRIENT EXPORT | RIPARIAN SUPPORT | EROSION SENSITIVITY | SALMONID HABITAT |
|--------------|-----------------------|----------------------|----------------------------|------------------------------|-----------------|------------------|---------------------|------------------|
| MW20 | H | L | ML | ML | M | MH | MH | H |
| MW21 | M | L | H | MH | H | H | L | MH |
| MW22 | L | L | H | MH | H | H | ML | H |
| MW23 | L | L | H | H | L | L | L | VL |
| MW25 | M | L | L | ML | H | H | MH | L |
| MW30 | M | L | ML | MH | H | H | L | H |
| MW60 | L | L | MH | H | L | L | L | VL |

UPPER MONTANA CREEK

| | | | | | | | | |
|------|---|---|----|----|---|----|----|----|
| UM1 | M | L | H | H | L | H | ML | VH |
| UM6 | M | L | MH | ML | H | H | ML | H |
| UM7 | L | H | MH | L | L | L | MH | VL |
| UM8 | L | M | MH | L | L | L | MH | VL |
| UM9 | L | M | H | ML | L | ML | ML | VL |
| UM10 | L | H | H | ML | L | H | ML | VL |
| UM11 | M | L | ML | ML | L | H | ML | VL |

ENVIRONMENTAL FUNCTIONS OF WETLAND UNITS

| DISTURBANCE SENSITIVE WILDLIFE | REGIONAL ECOLOGICAL DIVERSITY | ECOLOGICAL REPLACEMENT COST | RECREATION USE/ POTENTIAL | RECREATION USE/ ACTUAL | DOWNSLOPE BENEFICIARY SITES | HUMAN USE SUPPORT | AQUATIC USE SUPPORT | TERRESTRIAL USE SUPPORT |
|--------------------------------|-------------------------------|-----------------------------|---------------------------|------------------------|-----------------------------|-------------------|---------------------|-------------------------|
| ML | MH | M | ML | ML | L | 23 | 47 | 37 |
| MH | H | MH | H | MH | L | 37 | 43 | 49 |
| MH | MH | H | ML | ML | M | 34 | 43 | 45 |
| L | L | L | ML | ML | M | 34 | 21 | 19 |
| ML | MH | L | ML | ML | L | 21 | 40 | 37 |
| ML | MH | ML | ML | ML | L | 23 | 46 | 37 |
| L | L | L | ML | ML | M | 32 | 20 | 18 |

| | | | | | | | | |
|----|----|----|----|----|---|----|----|----|
| H | H | H | MH | MH | H | 43 | 45 | 56 |
| ML | MH | ML | MH | MH | H | 41 | 45 | 37 |
| L | L | M | MH | ML | H | 48 | 20 | 19 |
| L | L | M | MH | ML | H | 43 | 20 | 19 |
| L | MH | MH | MH | MH | H | 48 | 21 | 32 |
| ML | ML | MH | MH | ML | H | 50 | 26 | 28 |
| ML | MH | M | MH | ML | H | 34 | 30 | 37 |

APPENDIX II-F GENERAL PERMITS

General Permit 92-1, issued June 30, 1995
General Permits 2000-01, -02, -03, -04, issued July 24, 2000
General Permits 2000-01, -02, -03 renewed May 24, 2006

RECEIVED JUL 12 1995



US Army Corps
of Engineers

Alaska District
Regulatory Branch
Post Office Box 898
Anchorage, Alaska 99506-0898

Public Notice

30 JUNE 1995

Date:

Identification No.: SPN 95-03

In reply refer to above Identification Number

EXPIRATION DATE: 30 JUNE 2000

SPECIAL PUBLIC NOTICE 95-3

GENERAL PERMIT 92-1
JUNEAU WETLAND MANAGEMENT PLAN

A General Permit (GP) has been issued by the Alaska District, Corps of Engineers, in accordance with Title 33 CFR 325.2 (e) (2), as published in the Federal Register, Volume 51, number 219, pursuant to Section 404 of the Clean Water Act (PL 95-217, 33 U.S.C. 1344). This GP authorizes the placement of fill material into wetlands within the City and Borough of Juneau (CBJ) which have been designated 'C', 'D', 'EP', or as road corridors in the Juneau Wetlands Management Plan (JWMP), dated February 1991, and adopted in revised form by the Coastal Policy Council on October 31, 1991, and as approved for incorporation into the federally approved Alaska Coastal Management Plan (ACMP) pursuant to 15 CFR 923.84, effective November 23, 1993 (see Attachment 1 for the list of approved management categories), and as further revised in the attachments to the GP in this public notice.

Pre-discharge notification procedures have been added for projects that would involve mechanically clearing, excavating, or filling more than five acres of wetlands; individuals proposing to use the GP for projects of this magnitude will have to notify the Corps in accordance with procedures given in this public notice.

BACKGROUND

In response to Special Public Notice (SPN) 92-6, dated March 26, 1992, comments were received from local, state, and Federal agencies, concerned organizations, and the general public. The GP was revised to be more restrictive in response to these comments. Based on a review of all pertinent information, including a prepared environmental assessment, I have concluded that the issuance of this permit will not have more than minimal adverse impact on the environment and is not contrary to the general public interest. The Office of Management and Budget, Division of Governmental Coordination, concurred on May 18, 1992, under Section 307(c)(3) of the Coastal Zone Management Act of 1972, as amended by 16 U.S.C. 1456(c)(3), that the GP complies with the Alaska Coastal Management Program. A water quality certification under Section 401 of the Clean Water Act (Public Law 95-217) has been issued for this GP on June 16, 1992, by the Alaska Department of Environmental Conservation.

All activities will be in accordance with the conditions of the GP, a copy of which is attached. Failure to comply with the terms and conditions of the permit may result in suspension of the work, revocations of the permit, and/or imposition of penalties as provided by law.

The attached special and general conditions outline the criteria which must be met in order for work to be accomplished under this GP. An individual wishing to perform work under the GP must review these conditions carefully. If the proposed work does not meet the requirements of the conditions, the GP will not apply and an individual Department of the Army permit application must be submitted.

Any questions concerning the application of this GP may be addressed to Dr. Mary Lee Plumb-Mentjes at the above address or by calling toll-free in Alaska, 1-800-478-2712.

AUTHORITY: This GP is issued under the following authority: discharge of dredged or fill material into waters of the United States - Section 404 of the Clean Water Act (33 U.S.C. 1344). Our public interest review considered the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

District Engineer
U.S. Army Corps of Engineers

Attachments

GENERAL PERMIT 92-1

A General Permit (GP) has been issued by the Alaska District, Corps of Engineers, in accordance with Title 33 CFR 325.2 (e)(2), as published in the Federal Register, Volume 51, Number 219, pursuant to Section 404 of the Clean Water Act (PL 95-217, 33 U.S.C. 1344). This GP authorizes mechanical land clearing of wetlands, excavation of wetlands, and the placement of fill material into wetlands within the City and Borough of Juneau (CBJ) which have been designated 'C', 'D', 'EP', or as road corridors in the Juneau Wetlands Management Plan, dated February 1991, and adopted in revised form by the Coastal Policy Council on October 31, 1991, and as approved for incorporation into the Federally approved Alaska Coastal Management Plan (ACMP) pursuant to 15 C.F.R. 923.84, effective November 23, 1993 (see Attachment 1 for the list of approved management categories), and as further revised in the attachments to the GP in this public notice.

ACTIVITY

This GP authorizes the placement of fill into certain wetlands in the CBJ for the purposes of wetland or habitat enhancement, residential, commercial, industrial, transportation and public use in accordance with CBJ Title 49. In addition to the restrictions described in the revised JWMP adopted by the Coastal Policy Council on October 31, 1991, and as approved for incorporation into the Federally approved Alaska Coastal Management Plan (ACMP) pursuant to 15 C.F.R. 923.84, effective November 23, 1993, no authorization for fill is granted in this GP for the following activities: heavy industry, dry cleaning operations, hazardous waste disposal, battery transfer yards, commercial auto repair garages, and fuel storage sites. All activities built under this GP shall conform with the CBJ Land Use Code. The impacts of fill pads for other than excluded uses are similar regardless of surface use; further review and decisions concerning surface uses in the areas covered by this GP are appropriate to State and local government. This GP does not apply to estuaries or anadromous riverine wetlands, protective greenbelts, or any other wetland or corridor not designated C, D, or EP, or as a road corridor. The GP is based on the JWMP, dated February 1991, with the inclusion of revisions approved by the Coastal Policy Council on October 31, 1991, the revised list of wetland unit classifications with special conditions in the attachment to this GP, and the maps in the Juneau Wetlands, Functions and Values, Map Appendix, dated September 1987. The CBJ is planning to reprint the JWMP with all changes that are approved by the District Engineer and the National Oceanic and Atmospheric Agency's Office of Ocean and Coastal Resource Management. The GP will not be altered by any change in the CBJ's Plan unless the District Engineer or his designated representative determines that an alteration is not contrary to the public interest following a public interest review of the proposed change or alteration, and the GP is subsequently modified to incorporate these revisions.

PROCEDURE

All applicants desiring to mechanically clear, excavate, or discharge dredged and fill material under terms of this GP will submit an application to the CBJ Department of Community Development (Department). The application will require descriptions of the location, proposed activity, purpose and need. The description will include quantities of fill, acreage of disturbed surface area, steps that the applicant proposes to take to comply with the mitigation policies of the JWMP, source of fill, and offsite disposal locations, supported by applicable drawings and narrative.

The CBJ will determine if the proposed mechanical land clearing, excavation, or discharge of dredged and fill material meets local permit requirements and is consistent with the criteria of the GP. In all cases the CBJ will proceed with its review as soon as it receives an application.

For projects that would involve mechanically clearing, excavating, or filling between five and ten acres of wetlands, the CBJ will provide the Alaska District with a copy of the application; the Alaska District shall determine whether the GP applies and whether any additional special conditions shall be added to protect the Federal interest. The Alaska District shall have 15 days in which to make this determination. In reviewing an activity under the notification procedure, the District Engineer or his designated representative will determine whether the activity will result in more than minimal individual or cumulative adverse environmental effects or will be contrary to the public interest. The Alaska District shall notify the CBJ of its determination.

For projects that would involve mechanically clearing, excavating, or filling more than ten acres of wetlands, the CBJ will provide the Alaska District with a copy of the application, which the Alaska District will send to the Federal resource agencies for a pre-discharge notification (PDN) review. The Corps shall FAX the PDN to the Division of Governmental Coordination, the Alaska Department of Environmental Conservation, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Environmental Protection Agency, which shall notify the Alaska District within five calendar days if they intend to comment. An agency that has notified the Corps of its intention to comment shall have fifteen calendar days from the date of the original FAX to comment on the proposed activity. The Alaska District shall determine within 30 days of receipt of a complete application whether the GP applies and whether any additional special conditions shall be added to protect the Federal interest after considering the comments provided by the resource agency. The Alaska District shall notify the CBJ of its determination.

For projects that would involve mechanically clearing, excavating, or filling five or less acres of wetlands, the CBJ will determine whether the proposed activity is located in areas designated as road corridors or classified as a C, D, or EP wetland and meets the criteria of the GP. Issuance of the necessary CBJ Wetland Permit and other CBJ Title 49 Planning and Zoning permits will constitute authorization to proceed under this GP. As is currently the case, the CBJ will require that all necessary municipal authorizations be obtained before the requested mechanical land clearing, excavation, or discharge of dredged and fill material can proceed.

Authorization to proceed will require fulfillment of the general conditions specified here and of the special conditions applicable to particular sites as noted in the attachment to the GP, as well as fulfillment of any additional special conditions included in the CBJ Wetland Permit, as determined by the CBJ Wetlands Review Board. At the time of the issuance of the authorization, the CBJ will give a copy of the conditions for this GP to the permittee.

The CBJ authorization of the CBJ Wetland Permit would expire in eighteen months, if no other required CBJ permits have been issued, or no substantial construction progress has been made pursuant to these local permits, unless otherwise specified in the CBJ Wetland Permit. For any partially completed work, the permittee shall restore the site to pre-project conditions or apply for an extension or reauthorization under the GP from the CBJ.

INDIVIDUAL AUTHORIZATIONS

Any project which has any local authorization denied, is denied without prejudice, and an application for an individual Department of the Army (DA) permit will not be accepted by the Corps of Engineers. The Corps of Engineers retains the final review and authority to determine compliance of a given activity with the GP. The CBJ is expected to confer with the Corps in questionable or borderline proposals before the requisite local authorization to proceed under the GP is issued.

REPORTING

The CBJ shall compile information on authorizations issued under this GP and provide the Corps with the following information on a quarterly basis: copies of all applications and authorizations made under this GP for each quarter. Reports shall be submitted to the District Engineer by the following dates: April 10 (for January 1- March 31), July 10 (for April 1- June 30), October 10 (for July 1- September 30), and January 10 (for October 1- December 31).

The CBJ will submit to the District Engineer once a year the following information: total acreage permitted for mechanical land clearing, excavation, or discharge of dredged and fill material, number of permits granted, average permit processing time, and enforcement activities. In addition, a copy of the wetland mitigation bank annual report will be submitted to the District Engineer.

IMPLEMENTATION

Implementation will be in accordance with the JWMP of February 1991, as amended by the Coastal Policy Council on October 31, 1991, and the site-specific changes described in the attachment to this GP, and the CBJ implementing ordinance.

DURATION

The GP is in effect for a period of 5 years. At the end of the 5-year period, an evaluation of the program will be made and at that time it will be decided whether this permit should be renewed.

MAPS AND JURISDICTIONAL BOUNDARIES

The GP is based on the JWMP, dated February 1991, with the inclusion of revisions approved by the Coastal Policy Council on October 31, 1991, the revised list of wetland site classifications with special conditions attached to this GP, and the maps in the Juneau Wetlands, Functions and Values, Map Appendix, dated September 1987. The procedure for situations where the wetland designation or classification is in question and needs a more definitive jurisdictional determination consists of requesting field verification from the Corps of Engineers. The wetland units covered by this GP have been mapped on the CBJ Street Atlas. This Atlas is available for review from the CBJ Department of Community Development on 155 S. Seward Street, Juneau, Alaska, telephone 1-907-586-5235.

VERIFICATION

Except as specified in the Procedures Section with reference to pre-discharge notification, this GP does not require notification to the Corps of Engineers prior to commencement of the authorized activity, nor does it require confirmation from the Corps of Engineers that a proposed activity is in full compliance with all terms and conditions of this GP as authorized.

Nevertheless, a General Permittee may choose to request in writing a verification that his proposed activity is authorized by this GP by writing to the Alaska District, Corps of Engineers, Regulatory Branch, Project Evaluation Section - South, Post Office Box 898, Anchorage, Alaska 99506-0898. Any written inquiry must include the following information:

1. Name, address and telephone number of the applicant;
2. Location of the proposed work;
3. Brief description of the proposed work listed in the earlier Procedures Section of this GP;
4. Identification of the GP or permits which apply to the proposed work; and
5. Any other information that the applicant believes is appropriate.

If the General Permittee's written request for verification is complete, accurate and made in good faith, and the Alaska District does not respond to such inquiry within 20 days after the Alaska District receives such inquiry, the General Permittee may proceed with the activity, provided, all necessary CBJ permits are obtained. The General Permittee's authorization can only be suspended, modified or revoked in accordance with the procedure set forth in 33 CFR 325.7. If the Corps later determines that the General Permittee's written request for verification was inaccurate, incomplete or made in bad faith, and that the activity was not in fact authorized by the GP, the Federal Government may bring an appropriate enforcement action under 33 CFR Part 326.

GENERAL CONDITIONS

All authorizations issued under this GP are subject to the following conditions:

1. The amount of fill authorized by this GP shall not exceed the amount authorized by the CBJ in its wetland permit.
2. Activities authorized under this GP shall not adversely impact adjacent estuarine, riverine, or A and B wetlands by causing ponding, drainage, siltation or inadvertent fill. Culverting or other methods may be required to ensure compliance with this condition. Shoreline corridors shall be designated within 50 feet of the margins of anadromous fish streams and lakes, as provided in Policy 8 of the JWMP.
3. All fill material authorized under this GP shall be free from toxic pollutants in toxic amounts, as defined by Alaska State law.
4. Upon completion of earthwork operations, all exposed slopes, fills and disturbed areas shall be given sufficient protection, by appropriate means such as landscaping, or planting and maintaining vegetative cover to prevent subsequent erosion. All disturbed soil areas (exposed soils) shall be revegetated within the next growing season. Natural revegetation is acceptable if the site will revegetate itself within the next growing season. If natural revegetation is not successful, additional measures shall be taken to ensure compliance with this condition, such as interim protective cover until natural regrowth occurs.
5. No borrow material may be obtained within 330 feet of an eagle nest. This does not absolve the applicant from responsibilities to protect bald eagles under provisions of the Bald Eagle Protection Act.
6. No borrow material may be obtained from an estuarine, riverine, A or B wetland for activities covered under this GP.
7. This GP does not apply in areas or for activities currently covered by a Nationwide Permit. No additional authorization is required for Nationwide-Permitted activities.

8. The permittee must maintain the activity authorized by this GP in good condition and in conformance with the terms and conditions of this GP. The permittee is not relieved of this requirement if the permittee abandons the permitted activity, although the permittee may make a good faith transfer to a third party. Should the permittee wish to cease to maintain the authorized activity or should the permittee desire to abandon it without a good faith transfer, the permittee must obtain a modification of this permit from the Corps of Engineers, which may require restoration of the area.

9. All activities done under this GP (including the use of new borrow sites) shall not take place in or adversely affect any existing historical properties listed or eligible for listing in the National Register of Historic Places or any historical properties found to be listed or eligible for listing on the National Register of Historic Places subsequent to the issuance of this GP. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, the permittee must immediately notify the Corps of Engineers regarding the find. The Corps of Engineers will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

10. The permittee must comply with any conditions specified as part of the State water quality certification which is part of this GP.

11. Methods will be implemented to filter or settle out suspended sediments from all construction-related wastewater prior to its direct or indirect discharge into any natural body of water.

12. Design plans for any stormwater collection system to be placed into or associated with the authorized fill must be approved by the Alaska Department of Environmental Conservation prior to system construction or fill placement.

13. Measures are to be implemented to attenuate flows, remove oil, grease, and other petroleum products and filter suspended sediments from the project's stormwater collection system, if present, prior to discharge into any natural body of water or into an existing drainage structure which in turn discharges untreated storm water into a natural body of water. The installation of a treatment facility is not mandatory, if such a treatment facility is scheduled to be completed for the receiving system within 2 years of connecting the subject project's stormwater system to said system.

14. Design plans for any on-site sewage disposal system to be placed into or in association with the authorized fill must be approved by the Alaska Department of Environmental Conservation prior to placement of any fill or installation of said sewage system.

15. The permittee must allow the District Engineer, or his designated representatives, to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this GP.

16. This GP shall not apply to any activity or uses which would involve the storage or use of hazardous materials or substances as part of their principal purpose. These materials are defined in the Resource Conservation and Recovery Act and the Comprehensive Environmental Response and Liability Act.

17. All activities authorized under this GP must meet a clearly demonstrated need. The CBJ review and building permit will be instrumental in this respect to help prevent speculative projects and/or those contrary to the general public interest.

18. The applicant must design his proposed project so as to minimize the area of wetlands needed to be filled.

19. No equipment used for activities permitted under this GP shall be operated or stored on adjacent wetlands.

20. That all activities identified and authorized herein shall be consistent with the terms and conditions of the GP and activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this GP which may result in the modification, suspension or revocation of any authorization in whole or in part, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended, or revoked in whole or in part. In instances where the CBJ itself is party to violations of the Regulatory Program of the Corps of Engineers, the administration of this GP may revert, at the District Engineer's discretion, to the Alaska District, Corps of Engineers, until such time as the District Engineer determines that the situation has been resolved.

21. That all activities authorized herein shall, if they involve during their construction or operation, any discharge of pollutants into waters of the United States or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards, and management practices established pursuant to the Clean Water Act (PL 95-217 33 U.S.C. 1344), the Marine Protection, Research and Sanctuaries Act of 1972 (PL 92-532: 86 Stat. 1052) and pursuant to applicable State and local law.

22. That when the activity authorized herein involves a discharge during its construction or operation, of any pollutant (including dredged or fill material), into waters of the United States, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards, or within such longer period of time as the District Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

23. That the activity shall not jeopardize the continued existence of a threatened or endangered species, as identified under the Endangered Species Act, or endanger the critical habitat of such species.

24. That the permittee agrees to execute the construction or operation of the work authorized herein, including measures imposed by the CBJ Wetland Review Board to mitigate the adverse impacts of the work consistent with the enforceable policies of Chapter 3 of the JWMP, dated February 1991, as revised by the Coastal Policy Council on October 31, 1991, in a manner so as to minimize adverse impact on fish, wildlife and natural environmental values.

25. That the permittee shall maintain the structure or work authorized herein in good condition and in accordance with approved plans and drawings.

26. That an activity being performed under authorization of this permit may be summarily suspended, in whole or in part, upon a finding by the District Engineer that there has been a violation of any of the terms or conditions of this GP or that immediate suspension of the activity authorized herein would not be contrary to the general public interest. Such suspension shall be effective upon receipt by the permittee of a written notice thereof which shall indicate; (1) the extent of the suspension, (2) the reasons for such action, and (3) any corrective or preventive measures to be taken by the permittee which are deemed necessary by the District Engineer to abate imminent hazards to the general public interest. The permittee shall take immediate action to comply with the provisions of such notice. Within 10 days following receipt of a notice of suspension, the permittee may request a hearing in order to present information relevant to a decision as to whether the authorization should be reinstated, modified, or revoked. If a hearing is requested, it shall be conducted pursuant to procedures prescribed by the Chief of Engineers. After completion of the hearing, or within a reasonable time after issuance of the suspension notice to the permittee if no hearing is requested, the authorization will either be reinstated, modified, or revoked.

SPECIAL CONDITIONS (pertaining to specific sites in the Juneau Wetland Management Plan)

1. U11: Portions of the category C area shall be retained undisturbed through a site plan review process that shall consider: (a) siting residences to the extent practicable to maximize use of the nonwetland areas or lower value wetland areas that occur within the unit; (b) restricting fill associated with the residences, driveways and roads to the minimum amount necessary to achieve project purposes; (c) use of site plan techniques to consolidate development. The area shall be retained in a low density residential zoning (R1, D3, or D5). Construction mitigation techniques shall be used to avoid impacts to portions of the wetlands that will not be developed. CBJ staff shall consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

2. M4: This area is a Category C wetland that is an open pond located close to the taxiway and runway. The pond attracts waterfowl and shorebirds that represent a hazard to airplanes. The Airport plans to reduce the hazard by filling the pond and converting the area to a palustrine wetland which would attract fewer birds. The Airport shall work with a "Special Mitigation Committee" composed of State and Federal resource agencies, including the Alaska Department of Fish and Game, the Corps of Engineers, the Environmental Protection Agency, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service to design any wetland conversion project. The altered wetland would continue to serve wetland functions, such as providing sediment/toxicant retention for water draining from airfield facilities and entering Jordan Creek. The inclusion of this special condition in this GP shall not preclude the Airport from requesting that the wetland be eligible for more intensive development for airport facilities as the need develops. The need for development of a tie-down area at this site is not anticipated within the initial five-year GP period.

3. M7, M9, M10, and M13: If development is proposed in wetland units M7, M9, M10, or M13, the applicant shall be required to conduct mitigation to support and enhance the functioning of Jordan Creek in the area owned by the CBJ in wetland unit M7. The "Juneau Creeks Greenbelt Study", prepared by the CBJ with the assistance of the Alaska Department of Fish and Game in January 1984, lists possible mitigation projects for this section of Jordan Creek. These projects could be pursued as mitigation; however, the agency working group shall be consulted during the site plan review process to determine if this is the most appropriate mitigation for the proposed project.

4. M9: Development of wetland unit M9 shall involve a site plan review process that shall consider: (a) restricting fill to the minimum amount necessary to achieve stated project purposes; (b) consolidating development; and (c) if development of the wetland is to occur in phases, the lower value areas shall be developed first to the extent practicable.

Construction mitigation techniques shall be used to avoid impacts to the portion of the wetland that is not developed. This should include maintaining the hydrologic connection to the undisturbed portion of the wetland through wetland unit M10. The CBJ staff shall consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

5. M49, M51, M52, M53: In the proposed GP, M49, M51, and M53 were classified as "greenbelt"; M52 was classified C. These wetland units have been reclassified as C, subject to the special conditions stated below. The Airport proposes to relocate the section of Duck Creek that passes through Airport property in order to gain approximately eight acres that could be filled by the Airport under the GP with the approval of the CBJ Wetlands Review Board for the development of additional airfield facilities. Benefits to Duck Creek would be the improvement of fish habitat by moving it further from airport facilities; improving water quality by controlling the introduction of non-point source runoff from the airfield into the creek; providing an undisturbed greenbelt on both sides of the creek; providing shading of the creek; installing bottomless, arched culverts for the roadway and/or replacing perched culverts, as needed, within this section of the creek; and designing and constructing a channel which has characteristics that are more favorable to anadromous fish use. The following special conditions shall apply to the Duck Creek relocation project. Additional conditions may be applied to the project by the Wetlands Review Board when it reviews the Airport's application for a local wetlands permit.

a. The Airport shall provide a greenbelt along the relocated stream. The greenbelt will be a rectangular, protected corridor that is equal to the width of the stream (between ordinary high water marks) plus 100 feet, within which the stream may be designed to meander.

b. The Airport shall control non-point source runoff from the airfield and pass the water through an oil/water separator, as necessary, before such runoff enters the new Duck Creek channel.

c. The relocated Duck Creek channel shall be engineered and designed to ensure that the new stream provides habitat that is beneficial to anadromous fish, while not encouraging waterfowl attraction. There are features of the stream location that shall need to be taken into account and dealt with to ensure that the new stream functions correctly. For example, the new location appears to be significantly higher in elevation than the existing stream channel. It is essential that the engineering and design fully consider and address this, and other specific environmental conditions at the new site, to ensure that the new stream provides good anadromous fish habitat.

d. The Airport shall consult with the Special Mitigation Committee (composed of State and Federal resource agencies, including the Alaska Department of Fish and Game, the Corps of Engineers, the Environmental Protection Agency, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service) during the environmental analysis, engineering, design and construction of the project.

Advisory: Under Title 16, the Alaska Department of Fish and Game shall be required to approve the design and construction of the new stream channel and ensure that good anadromous fish habitat shall be provided before any work can begin.

6. MW5: Fill shall be restricted to the minimum amount necessary to achieve project purposes. Construction mitigation techniques shall be used to avoid impacts to portions of the wetland that will not be developed. CBJ staff shall consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board. Applicants shall be required to conduct mitigation that is appropriate to enhance the wetland values in the immediate area. For example, the applicant could be required to enhance waterfowl use of the area through development of waterfowl staging ponds on the CBJ-owned property (MW4) to enhance the regional ecological diversity of the area. The agency working group shall be consulted to determine if this is the most appropriate mitigation strategy for the proposed project.

LIMITS OF THIS AUTHORIZATION

1. This GP or authorizations obtained under this GP do not obviate the need to obtain other Federal, State, or local authorizations required by law nor does it apply to activities denied by any State, Federal agency or the CBJ.
2. This GP does not convey property rights, either in real estate or material, or exclusive privileges; and that it does not authorize injury to property, or invasion of rights or any infringement of Federal, State, or local laws or regulations nor does the GP nor any authorization obviate the requirement to obtain State or local assent required by law for the activity authorized herein.
3. This GP or authorizations obtained under this GP do not authorize interference with any existing or proposed Federal project.
4. In issuing this GP or authorizations obtained under this GP, the Federal Government does not assume any liability for the following:
 - a. damages to an authorized project or uses thereof as a result of the permitted or unpermitted activities or from natural causes;
 - b. damages to an authorized project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest;
 - c. damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this GP;
 - d. design or construction deficiencies associated with the authorized work;
 - e. damage claims associated with any future modification, suspension, or revocation of this GP or authorizations obtained under this GP.
5. The Alaska District may reevaluate its decision on the GP or any authorizations made under this GP by either this office or the CBJ at any time the circumstances warrant. Circumstances that would require a reevaluation include, but are not limited to, the following:
 - a. the permittee or the CBJ fails to comply with the terms and conditions of this GP,
 - b. the information provided by the permittee in support of an application for authorization under this GP proves to have been false, incomplete, or inaccurate, or

c. significant new information surfaces which this office did not consider in reaching the original public interest decision.

d. the CBU itself is found to be party to violations of the Clean Water Act. If the District Engineer determines that this has occurred, the administration of this GP may revert to the Alaska District, Corps of Engineers, until such time as the issue is resolved to the District Engineer's satisfaction.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring the permittee to comply with the terms and conditions of the GP and for the initiation of legal action where appropriate. The permittee will be required to pay for any corrective measures ordered by this office, and if the permittee fails to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill the permittee for the cost.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Date:



Peter A. Topp
Colonel, Corps of Engineers
District Engineer

Revision of Wetland Unit Classifications

The classification of the following wetland units has been revised in this General Permit (GP). More than twenty-eight wetland units (or parts of units) were classified C in the Juneau Wetland Management Plan (JWMP), February 1991, which had environmental ratings based on "Juneau Wetlands: Functions and Values", September 1987, by Adamus Resource Assessment, Inc., that would have indicated a classification of A or B based on environmental characteristics alone. The difference in classification in the February 1991 edition of the Plan is due to the CBJ factoring into its determination of the appropriate classification its analysis of practicable alternatives and public preference.

These sites were visited in the field by a Corps representative, and all readily available information on these sites was reviewed. Consideration was given primarily to the issue of current environmental value, as based on the field investigation and an evaluation of the possibility of allowing a C classification of a portion of a site that would have minimal environmental impact with the addition of site-specific conditions, and which would assist in directing residential and industrial growth into areas where it would have the least additional environmental impact.

Further, sixteen wetland units that were classified as B in the JWMP, dated February 1991, but which the Advanced Identification of Possible Disposal Sites and Areas Generally Unsuitable for Disposal Site Specification in the CBJ, Alaska, dated October 16, 1989, (Advanced Identification) classified as "possible future disposal sites", are classified as C in this GP; the reclassified units are A5a, A5b, A8, A12, DW3, DW4, DW6, DW11, DW12, MW13, MW14, MW15, MW16, ML2, ML17, and UM8.

Note: the GP is based on mapping by the Alaska District, Corps of Engineers, Regulatory Branch, as shown in the Juneau Wetlands, Functions and Values, Map Appendix, September 1987; many small wetlands not shown are protected by law, but are not included in this GP. The CBJ will be reissuing the maps for the JWMP once all changes in classification have been made; the new maps will be done by a cartographer and will better represent the areas where changes have been made during revisions of the GP.

Note: the residential road corridor designation is described on page 30 of the JWMP, February 1991, with further amendments by the Coastal Policy Council on October 31, 1991. It applies only to residential development on parcels where public water is already provided, the parcel is already affected by development and is subdivided into small lots. This rule allows residential development to be reviewed under category C guidelines

in cases where: (1) the residential parcel is in a development corridor served by public water and existing local access roads; (2) the property owner has no practicable upland alternative to wetland development; and (3) the proposal shall consist of only residential building pads and direct access to them. The residential road corridor rule is quoted in part here: "Undeveloped palustrine wetland residential parcels with no practicable upland development alternatives shall have a temporary 100-foot category C designation corridor measured from the road frontage right-of-way,.... Developed palustrine residential parcels shall have a category C designated envelope that is 30 percent larger than their existing fill footprint.... Undeveloped residential parcels with an upland practicable development alternative on the parcel shall retain their original designated management category."

Note: Riverine and lacustrine shoreline corridors take priority over all other management categories and designations. All catalogued anadromous fish streams shall have a 50-foot shoreline corridor on each side of the stream, measured from the ordinary high water mark in the main channel up to the point shown in "An Atlas to the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes" indicating the presence of anadromous fish. The 50-foot shoreline corridor shall be designated and managed as wetland category A. There shall be a 50-foot shoreline corridor around lakes, measured from the ordinary high water mark of the shoreline; the lacustrine shoreline corridor shall only apply to bodies of water more than 20 acres in area with water depths in the deepest part of the basin exceeding 6.6 feet at low water. If the lacustrine wetland or adjacent palustrine wetland is category A, then the 50-foot lakeshore corridor shall be category A. In all other cases the lakeshore corridor shall be category B. This rule applies only to wetlands.

AUKE BAY

Classifications of A5a, A5b, A8, and A12 have been changed in this GP from those in February 1991 JWMP; the GP classifies these sites as C based on the Advanced Identification finding that these sites would be "possible future disposal sites".

The road corridor in A5 along Mendenhall Back Loop Road applies to one lot on the southern side of the road (on the curve) and one lot on the northern side of the road (not on the curve). No stream passes through the road corridor lot on the northern side. Note: the road corridor designation has been removed from the lots on the northern side on the curve due to the presence of nonwetland alternatives and the value of the fish habitat in the adjacent drainage. It was not removed from the lots on the southern side of the curve due to the presence of extensive disturbance and inadequate nonwetland for building.

A5: The map in the GP has been redrawn on the northern side of the road to reflect the wetland mapping in the September 1987, Juneau Wetlands, Functions and Values, Map Appendix, and confirmed by onsite inspection.

A6: Reclassify as B; however, allow a road corridor in A6 along Mendenhall Back Loop Road (four vacant lots).

A7: This 101-acre tract near the University of Alaska at Juneau should be reclassified B, not retained as C. Development of this large, undisturbed tract is not appropriate under GP.

MONTANA

UM1: Redraw area shown as C to accommodate a "fringe" residential area 500' wide, measured from edge of Montana Creek Road, which would be adequate for development two lots deep with a feeder road. Portions of the category C area will be retained undisturbed through a site plan review process that will consider: (1) siting residences to the extent practicable to maximize use of the nonwetland areas or lower value wetland areas that occur within the unit; (2) restricting fill associated with the residences, driveways and roads to the minimum amount necessary to achieve project purposes; (3) use of site plan techniques to consolidate development. The area will be retained in a low density residential zoning (D1, D3, or D5). Construction mitigation techniques will be used to avoid impacts to portions of the wetlands that will not be developed. CBJ staff will consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

Proposed road corridor in UM1 along north side of Mendenhall Back Loop Road was not approved; it would have applied only to lots with homes where additional development on the lots was restricted as a condition of the Department of the Army (DA) permit.

Classification of UM8 has been changed in this GP from that in February 1991 JWMP; the GP classifies this site as C based on the Advanced Identification finding that this site would be a "possible future disposal site".

Proposed road corridor in ML1 along the south side of Mendenhall Back Loop Road and along Wren Drive was not approved due to generally undeveloped character of area and its high functional value.

ML2: This area should be classified C, as it was in the February 1991 JWMP, not B, as was approved by the Coastal Policy Council on October 31, 1991.

ML16: This area should be shown with a B classification except for road corridors.

The road corridor in ML16 applies to six lots: two developed lots (#1129 and #1131) on Slim Willow Road, two lots on Arctic Circle (#1025 and #1027), one lot (#5230) on Terrace Place, and one lot (#9365) on View Drive. Note: the stream flowing into the Mendenhall River that passes near the road corridor (#9365 View Drive) supports anadromous fish (coho); the stream corridor applies to this even though it is not in the current Anadromous Fish Catalog; it is the only unlisted stream to which the stream corridor applies in this GP.

ML17: This area should be classified C, as it was in the February 1991 JWMP, not B, as was approved by the Coastal Policy Council on October 31, 1991.

LEMON CREEK

L4: The map in Plan should be changed to reflect classification as B; this area is subject to an existing DA permit.

L5: The map in Plan should be changed to reflect classification as B; this area is subject to an existing DA permit.

L12: The map in Plan should be changed to reflect classification as B, as originally provided in the February 1991 JWMP. The residential road corridor does not apply in this wetland. The entire site should be classified as B.

L13: Confirm C classification.

L14: Reclassify as B, not C. This large, undisturbed wooded wetland with the headwaters of Vanderbilt Creek is on the periphery of wetlands. The sites of former trailer parks and quarry in the immediate vicinity appear to offer alternatives for development.

L15: Reclassify as B, not C. A tributary of Switzer Creek, an anadromous fish stream, flows through this wetland.

L17: Confirm C classification. DA permit, Lemon Creek 10, covered this area.

L18: Northern portion of this area is covered under DA permit, Lemon Creek 10.

The remainder of this area to be classified C subject to the first condition of DA permit, Lemon Creek 10 (same as fourth stipulation of Alaska Department of Environmental Conservation 401 Water Quality Certification): A surface hydrological connection shall be constructed and maintained along the east portion of the project area which connects the preserved wetland area ([northern portion]) of L18 in the JWMP Map

Appendix, dated September 1987. An additional portion at the southern end of L18 was filled after 1984 (date of photos used in JWMP Map Appendix, dated September 1987). Remaining unfilled area, not subject to special conditions in DA permit, Lemon Creek 10, is classified C with special condition, "That water quality (sediment/toxicant retention, erosion sensitivity, and hydrological functions of area be maintained." The C classification is acceptable in the remaining area due to its being surrounded by industrial development that compromises its functioning as habitat for disturbance sensitive wildlife.

EAST VALLEY

D7: Reclassify as B; changed from EP. This pond provides overwintering habitat now to coho.

D8: Reclassify as B. This wetland serves important physical functions in the midst of a developed area.

The road corridor in J3 was rejected; it would have applied only to 3713 Amalga where the undeveloped land is entirely in the stream buffer.

The road corridor in J5 applies only to one vacant lot and seven filled lots on Marilyn Avenue and only predominantly developed lots on Melissa Drive.

J7: Confirm classification of wetland area west of Teslin Street as C; the wetland area east of Teslin Street would require an individual permit with the exception of the five northernmost lots (approximately 519 feet from junction of Atlin Drive and Teslin) which would be in a road corridor unless individually determined to not be subject to Corps jurisdiction. The statement made in the previous public notice about the character of the land between these lots and Jordan Creek was in error; most of the area is nonwetland; the 1987 Map Appendix is correct in its mapping of this area near Jordan Creek.

M1: Reclassify as B, that is, an individual DA permit will be required.

M1A: Reclassify as B, that is, an individual DA permit will be required.

M1B: Reclassify as B, that is, an individual DA permit will be required.

M1C: Reclassify as B, that is, an individual DA permit will be required.

M3: Reclassify entire site as B.

M4: This area is a Category C wetland that is an open pond located close to the taxiway and runway. The pond attracts waterfowl and shorebirds that represent a hazard to airplanes. The Airport plans to reduce the hazard by filling the pond and converting the area to a palustrine wetland which would attract fewer birds. The Airport will work with a "Special Mitigation Committee" composed of State and Federal resource agencies, including the Alaska Department of Fish and Game, the Corps of Engineers, the Environmental Protection Agency, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service to design the wetland conversion project. The altered wetland would continue to serve wetland functions, such as providing sediment/toxicant retention for water draining from airfield facilities and entering Jordan Creek. The inclusion of this special condition in this GP will not preclude the Airport from requesting that the wetland be eligible for more intensive development for airport facilities as the need develops. The need for development of a tie-down area at this site is not anticipated within the initial five-year GP period.

M5: Reclassify as A for wetland area within airport perimeter fence. Stream corridor protection applies to Jordan Creek. Mitigation work was conducted in this unit to improve the habitat of the anadromous fish stream as mitigation for construction of the parallel taxiway.

M7, M9, M10, and M13: If development is proposed in wetland units M7, M9, M10, or M13, the applicant would be required to conduct mitigation to support and enhance the functioning of Jordan Creek in the area owned by the CBJ in wetland unit M7. The "Juneau Creeks Greenbelt Study", prepared by the CBJ with the assistance of the Alaska Department of Fish and Game in January 1984, lists possible mitigation projects for this section of Jordan Creek. These projects could be pursued as mitigation; however, the agency working group will be consulted during the site plan review process to determine if this is the most appropriate mitigation for the proposed project.

M7: Reclassify undisturbed wetland west of Jordan Creek as B; confirm C classification of wetland east of Jordan Creek which has been substantially disturbed in the past, but not the undisturbed area at northern end which is currently under consideration in DA permit application, Jordan Creek 8. Stream buffer applies to Jordan Creek; however, in some areas development has occurred right up to creek. See reference to M7 in the stipulation above.

M9: Confirm C classification. Development of wetland unit M9 will involve a site plan review process that will consider: (1) restricting fill to the minimum amount necessary to achieve stated project purposes; (2) consolidating development; and (3) if development of the wetland is to

occur in phases, developing to the extent practicable the lower value areas first. Construction mitigation techniques will be used to avoid impacts to the portion of the wetland that is not developed. This would include maintaining the hydrologic connection to the undisturbed portion of the wetland through wetland unit M10. CBJ staff will consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

M26: Confirm B classification; road corridor does not apply.

M27: Reclassify as B, not C. This area of undisturbed, emergent marsh between Old Glacier Highway and Egan Drive is still connected by a culvert with the Mendenhall wetlands.

M49, M51, M52, M53: In the proposed GP, M49, M51, and M53 were classified as "greenbelt"; M52 was classified C. These wetland units have been reclassified as C, subject to the special conditions stated below. The Airport proposes to relocate the section of Duck Creek that passes through Airport property in order to gain approximately eight acres that could be filled by the Airport under the GP with the approval of the CBJ Wetlands Review Board for the development of additional airfield facilities. Benefits to Duck Creek would be the improvement of fish habitat by moving it further from airport facilities; improving water quality by controlling the introduction of non-point source runoff from the airfield into the creek; providing an undisturbed greenbelt on both sides of the creek; providing shading of the creek; installing bottomless, arched culverts for the roadway and/or replacing perched culverts, as needed, within this section of the creek; and designing and constructing a channel which has characteristics that are more favorable to anadromous fish use. The following special conditions will apply to the Duck Creek relocation project. Additional conditions may be applied to the project by the Wetlands Review Board when it reviews the Airport's application for a local wetlands permit.

1. The Airport will provide a greenbelt along the relocated stream. The greenbelt will be a rectangular, protected corridor that is equal to the width of the stream (between ordinary high water marks) plus 100 feet, within which the stream may be designed to meander.

2. The Airport will control non-point source runoff from the airfield and pass the water through an oil/water separator, as necessary, before such runoff enters the new Duck Creek channel.

3. The relocated Duck Creek channel will need to be engineered and designed to ensure that the new stream provides habitat that is beneficial to anadromous fish, while not encouraging waterfowl attraction. There are features of the stream location that will need to be taken into account and dealt with to ensure that the new stream functions correctly. For example, the new location appears to be significantly higher in elevation than the existing stream channel. It is essential that the engineering and design fully consider and address this, and other specific environmental conditions at the new site, to ensure that the new stream provides good anadromous fish habitat.

4. The Airport will consult with the Special Mitigation Committee (composed of State and Federal resource agencies, including the Alaska Department of Fish and Game, the Corps of Engineers, the Environmental Protection Agency, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service) during the environmental analysis, engineering, design and construction of the project. Advisory: Under Title 16, the Alaska Department of Fish and Game will be required to approve the design and construction of the new stream channel and ensure that good anadromous fish habitat will be provided before any work can begin.

DOUGLAS

Road corridor approved for lots that qualify along North Douglas Highway.

NOTE: the road corridor off of Sundown in Bayview Subdivision (part of DW8) has been reclassified as B; the creek is tidally influenced.

DE1: Reclassify as B, not C.

DE7: Reclassify as B, not C.

DE9: Reclassify as B, not C.

DE10: Reclassify as B, not C.

Classifications of DW3, DW4, DW6, DW11, DW12 have been changed in this GP from those in February 1991 JWMP; the GP classifies these sites as C based on the Advanced Identification finding that these sites would be "possible future disposal sites".

WEST VALLEY

MW1: Reclassify as B. The golf course has minimal impact on the area's wetlands.

MW2: Note: one portion has already been filled under an individual Corps permit; the map has been changed to reflect that this portion is no longer jurisdictional wetland.

MW3: Confirm western portion as B; reclassify small eastern extension as C (see description of dividing line for MW5).

MW3A: Reclassify unit (8 acres) as B.

MW4: Reclassify unit (13 acres) as B. See reference to MW4 in stipulation for MW5.

MW5: Divide the wetlands by a northern extension of the eastern boundary of MW4; reclassify the western portion of MW5 as B and confirm the eastern portion of MW5 as C. Fill will be restricted to the minimum amount necessary to achieve project purposes. Construction mitigation techniques will be used to avoid impacts to portions of the wetland that will not be developed. CBJ staff will consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board. Applicants will be required to conduct mitigation that is appropriate to enhance the wetland values in the immediate area. For example, the applicant could be required to enhance waterfowl use of the area through development of waterfowl staging ponds on the CBJ-owned property (MW4) to enhance the regional ecological diversity of the area. The agency working group will be consulted to determine if this is the most appropriate mitigation strategy for the proposed project.

MW6: The City and Borough of Juneau changed the classification of MW6 from C to B following publication of the February 1991 JWMP. This change in wetland classification was approved by the Alaska Coastal Policy Council on October 31, 1991. The GP confirms this classification as category B. Note: that a small area of MW6 that is former pasture may not be jurisdictional wetland; a DA wetland determination is pending.

MW11: The City and Borough of Juneau changed the classification of MW11 from B to C following publication of the February 1991 JWMP. This change in wetland classification was approved by the Alaska Coastal Policy Council on October 31, 1991. However, the Corps of Engineers finds that this area should be retained as category B since this area is undisturbed with little or no road access.

Classifications of MW13, MW14, MW15, and MW16 have been changed in this GP from those in February 1991 JWMP; the GP classifies these sites as C based on the Advanced Identification finding that these sites would be "possible future disposal sites".

Road corridor in MW11 along Engineer's Cutoff Road applies only to lots that are already developed; road corridor would allow 30% expansion of the existing fill sites subject to restrictions associated with road corridor and stream corridors.

The road corridor previously proposed in MW20 which would have been applied to a single lot has been reclassified as B, i.e., no longer road corridor, to assure protection of the anadromous stream which passes through the lot.

Road corridor proposed for MW6 and MW21 area (Wildmeadow) was rejected due to value of emergent marsh.

MW22: The majority of the forested area has been determined to be nonwetland based on further on-site investigation. The small wetland inclusions within this 17-acre tract would be classified as C. Note that the scrub-shrub wetland area adjacent to southeastern end is part of MW30 which is classified as B; no change in MW30's boundaries is proposed here.

MW23: Confirm C classification of unit (1 acre).

Industrial Boulevard: A 300-foot wide border along both sides of Industrial Boulevard is to be classified as either nonwetland or C (i.e., MW60 and any unmapped wetland pockets) with the exception of the tract west of Industrial Boulevard, south of Gastineau Contractors, this is a restored wetland tract which was converted to wetland as part of the DA permit agreement. Note: a minor correction has been made on the map of the restored wetland area to show that one corner is not subject to Corps jurisdiction.

Attachment 1
JUNEAU WETLANDS MANAGEMENT PLAN
 Final Management Categories
 July 21, 1993

| <u>Area</u> | <u>Wetland Unit</u> | <u>Classification</u> | <u>Approximate Acreage</u> | |
|--------------|---------------------|-----------------------|----------------------------|-----|
| Auke Bay | A1 | C | 40 acres | |
| | A2 | Lake | — | |
| | A5 | A | 44 | |
| | A5a* | C | 3 | |
| | A5b* | C | 6 | |
| | A6* | B | 3 | |
| | A7* | B | 101 | |
| | A8* | C | 11 | |
| | A9 | C | 4 | |
| | A10 | B | 5 | |
| | A11 | B | 15 | |
| | A12* | C | 1 | |
| | A13 | B | 4 | |
| | A14 | C | 2 | |
| | A15 | C | 2 | |
| | A17 | C | 2 | |
| | A19 | D | 2 | |
| | Montana Creek | ML1 | A | 245 |
| | | ML2* | C | 1 |
| ML15 | | Greenbelt | — | |
| ML16 | | B | 8 | |
| ML17* | | C | 2 | |
| ML19 | | B | 1 | |
| UM1 (split)* | | C | 25 | |
| | | A | 193 | |
| UM6 | | B | 9 | |
| UM7 | | B | 3 | |
| UM8* | | C | 7 | |
| Lemon Creek | UM9 | B | 87 | |
| | UM10 | B | 6 | |
| | UM11 | B | 5 | |
| | L1 | B | 1 | |
| | L4* | B | 6 | |
| | L5* | B | 16 | |
| | L6 (split) | A | 25 | |
| | | B | 12 | |
| L7 and L7A | C | 10 | | |
| L8 | A | 10 | | |

JUNEAU WETLANDS MANAGEMENT PLAN
 Final Management Categories
 July 21, 1993

| <u>Area</u> | <u>Wetland Unit</u> | <u>Classification</u> | <u>Approximate Acreage</u> | |
|----------------|---------------------|-------------------------|----------------------------|-----|
| Lemon Creek | L12* | B | 18 acres | |
| | L13 | C | 1 | |
| | L14* | B | 9 | |
| | L15* | B | 1 | |
| | L17 | C | 2 | |
| | L18 | C | 4 | |
| | L20 | C | 6 | |
| | L21 | C | 1 | |
| | L22 | C | 1 | |
| | L23 | C | 4 | |
| | L90 | D | 2 | |
| | L91 | D | 2 | |
| | East Valley | D2 | EP | --- |
| | | D3 | EP | --- |
| | | D4 | EP | --- |
| | | D5 | EP | --- |
| | | D6 | EP | --- |
| D7* | | B | <1 | |
| D8* | | B | <1 | |
| D11 | | Pond | --- | |
| J1 | | B | 18 | |
| J2 | | A | 34 | |
| J3 | | A | 3 | |
| J4 | | A | 40 | |
| J5 | | A | 36 | |
| J6 | | B | 21 | |
| J7 (split)* | | B (400' X 100', 4 lots) | 1 | |
| | | C | 7 | |
| | | B | 140 | |
| | B | | | |
| | B | | | |
| | B | | | |
| | EP | --- | | |
| | B | 13 | | |
| | C | 7 | | |
| | A | 3 | | |
| | C | 4 | | |
| | B | 7 | | |
| | C | 5 | | |

JUNEAU WETLANDS MANAGEMENT PLAN
 Final Management Categories
 July 21, 1993

| <u>Area</u> | <u>Wetland Unit</u> | <u>Classification</u> | <u>Approximate Acreage</u> | |
|----------------|----------------------|-----------------------|----------------------------|-----|
| East Valley | M8 | C | 3 acres | |
| | M9 | C | 5 | |
| | M10 | C | 1 | |
| | M13 | C | 1 | |
| | M14 | B | 3 | |
| | M15 | C | 1 | |
| | M17 | C | 2 | |
| | M18 | C | 1 | |
| | M19 | Greenbelt | -- | |
| | M20 | Greenbelt | -- | |
| | M21 | Greenbelt | -- | |
| | M26 | B | 5 | |
| | M27* | B | 6 | |
| | M49* | C | 2 | |
| | M50 | C | 1 | |
| | M51* | C | 2 | |
| | M52 | C | <1 | |
| | M53* | C | <1 | |
| | Douglas | DE1* | B | 5 |
| | | DE2 | B | 172 |
| | | DE3 | A | 95 |
| DE4 | | A | 500 | |
| DE5 | | C | 3 | |
| DE7 | | B | 3 | |
| DE8 | | Federal | -- | |
| DE9* | | B | 5 | |
| DE10* | | B | 3 | |
| DW2 | | B | 225 | |
| DW3* | | C | 14 | |
| DW4* | | C | 22 | |
| DW5 | | C | 10 | |
| DW6* | | C | 1 | |
| DW7 | | B | 52 | |
| DW8 | B | 100 | | |
| DW9 | CBJ-owned Open Space | --- | | |
| DW11* | C | 8 | | |
| DW12* | C | 5 | | |
| DW13 | C | 4 | | |
| DW15 | B | 5 | | |

JUNEAU WETLANDS MANAGEMENT PLAN
Final Management Categories
July 21, 1993

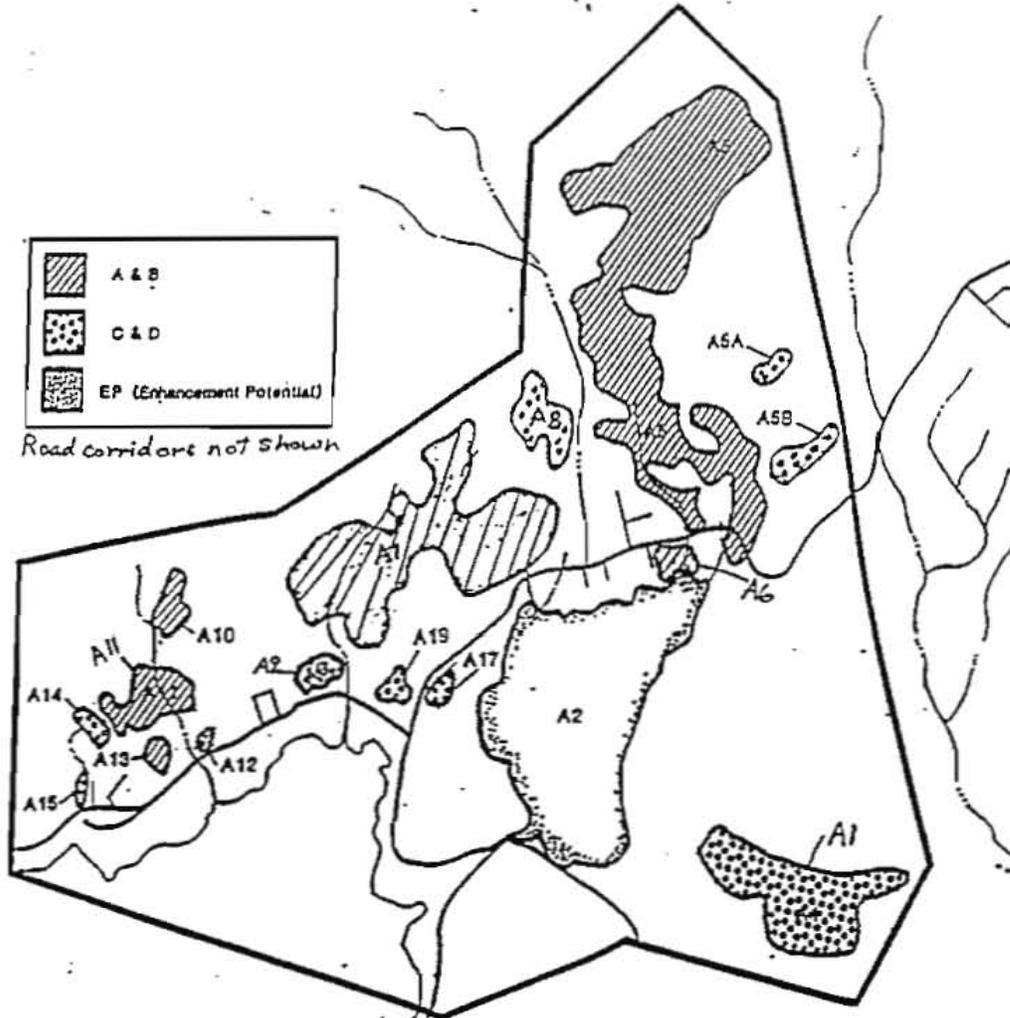
| <u>Area</u> | <u>Wetland Unit</u> | <u>Classification</u> | <u>Approximate Acreage</u> |
|-------------|---------------------|-----------------------|----------------------------|
| Douglas | DW16 | Refuge | — |
| | DW17 | Refuge | — |
| | DW18 | Refuge | — |
| West Valley | MW1* | B | 22 acres |
| | MW2 | B | 70 |
| | MW3 (split)* | B | 6.5 |
| | | C | 1.5 |
| | MW3A* | B | 8 |
| | MW4* | B | 13 |
| | MW5 (split)* | B | 13.5 |
| | | C | 6.5 |
| | MW6* | B | 40 |
| | MW9 | C | 1 |
| | MW11 | B | 54 |
| | MW12 | C | <1 |
| | MW13* | C | <1 |
| | MW14* | C | 2 |
| | MW15* | C | <1 |
| | MW16* | C | 2 |
| | MW17 | C | 3 |
| | MW18 | C | 2 |
| | MW19 | D | 4 |
| | MW20 | B | 1 |
| MW21 | B | 30 | |
| MW22 | C | 17 | |
| MW23 | C | 1 | |
| MW25 | B | 1 | |
| MW30 | B | 10 | |
| MW60 | C | 5 | |

* These units are revisions to the classifications of management categories in the Juneau Wetlands Management Plan submitted as a routine program implementation change to the Alaska Coastal Policy Council

JUNEAU WETLANDS MANAGEMENT PLAN

MANAGEMENT DESIGNATIONS

AUKE BAY



AUKE BAY

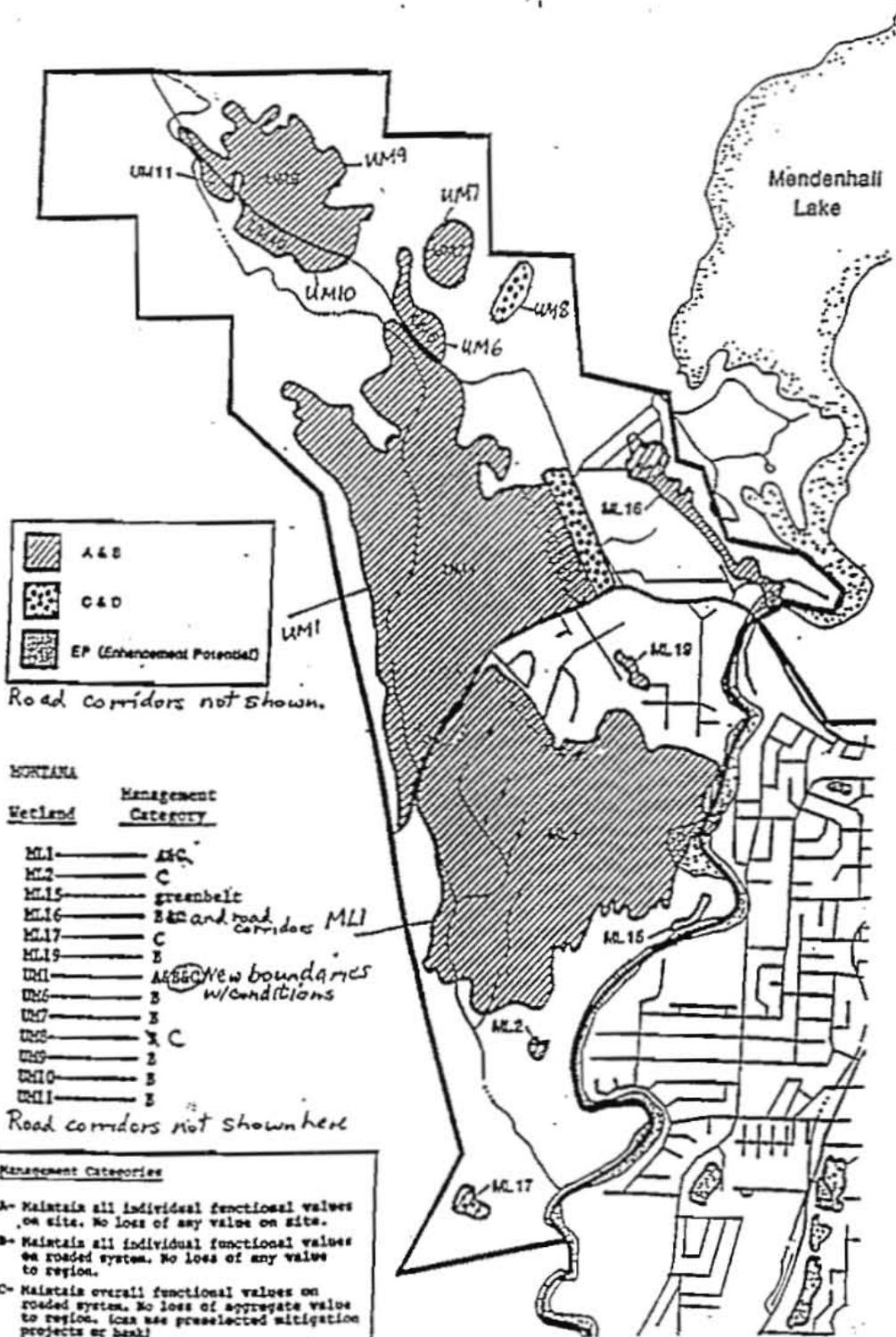
| Wetland | Management Category |
|---------|---------------------|
| A1 | C |
| A2 | Lake |
| A5 | A and road corridor |
| A5A | C |
| A5B | C |
| A6 | B and road corridor |
| A7 | B |
| A8 | C |
| A9 | C |
| A10 | B |
| A11 | B |
| A12 | C |
| A13 | B |
| A14 | C |
| A15 | C |
| A17 | C |
| A19 | D |

Road corridors not shown

GP-92-1, Revised 12/7/92

| Management Categories | |
|-----------------------|--|
| A- | Maintain all individual functional values on site. No loss of any value on site. |
| B- | Maintain all individual functional values on roaded system. No loss of any value to region. |
| C- | Maintain overall functional values on roaded system. No loss of aggregate value to region. (can use preselected mitigation projects or bank) |
| D- | Minimize loss of functional values. (mitigation bank or projects not required) |

JUNEAU WETLANDS MANAGEMENT PLAN
MANAGEMENT DESIGNATIONS
 MONTANA

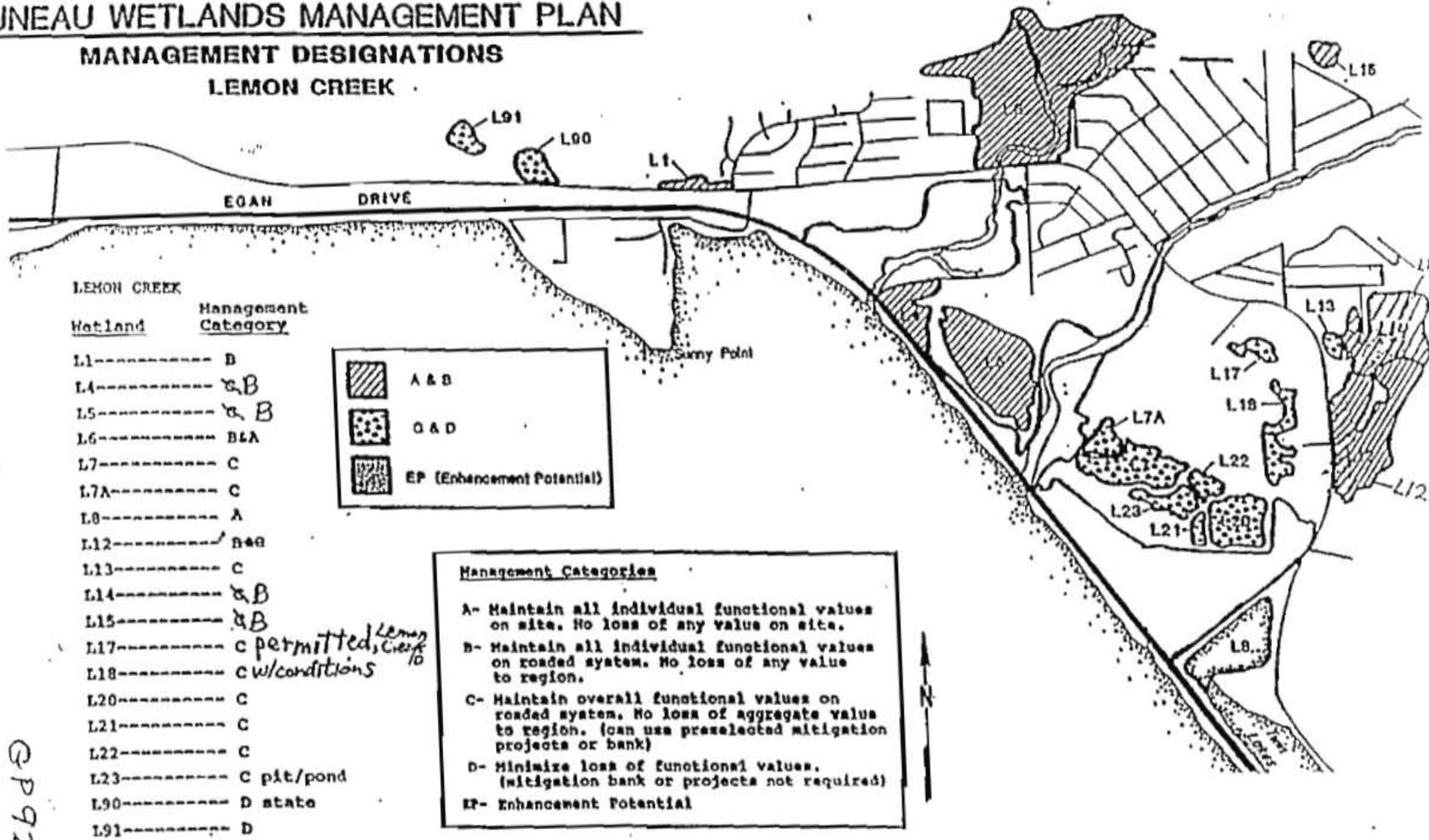


GP 92-1, Revised 12/7/92

JUNEAU WETLANDS MANAGEMENT PLAN

MANAGEMENT DESIGNATIONS

LEMON CREEK



LEMON CREEK

Wetland Management Category

| | |
|----------|--------------------------|
| L1----- | D |
| L4----- | A & B |
| L5----- | A & B |
| L6----- | B & A |
| L7----- | C |
| L7A----- | C |
| L8----- | A |
| L12----- | A & B |
| L13----- | C |
| L14----- | A & B |
| L15----- | A & B |
| L17----- | C permitted, Lemay Creek |
| L18----- | C w/conditions |
| L20----- | C |
| L21----- | C |
| L22----- | C |
| L23----- | C pit/pond |
| L90----- | D state |
| L91----- | D |

| | |
|--|----------------------------|
| | A & B |
| | C & D |
| | EP (Enhancement Potential) |

Management Categories

A- Maintain all individual functional values on site. No loss of any value on site.

B- Maintain all individual functional values on roaded system. No loss of any value to region.

C- Maintain overall functional values on roaded system. No loss of aggregate value to region. (can use preselected mitigation projects or bank)

D- Minimize loss of functional values. (mitigation bank or projects not required)

EP- Enhancement Potential

GP 92-1

CP 92-1
 Road Corridors not shown
 OSU Community Development Dept 1/91

A & B 
 C & D 
 E (Enhancement Potential) 

Road Corridors
 not shown here.

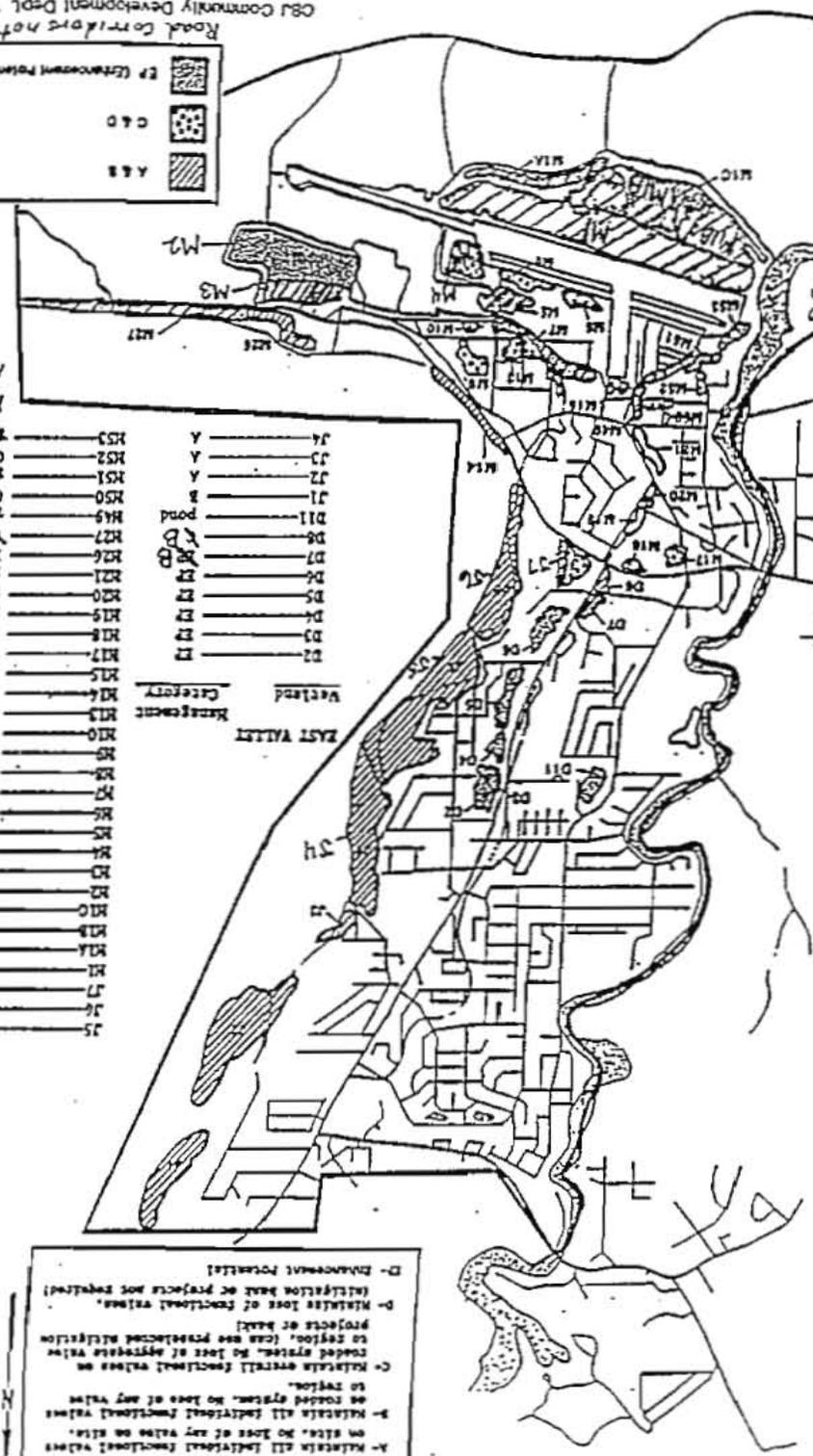
- 35 A and road corridor
- 36 B
- 37 C and B and road corridor
- 38 A
- 39 B
- 40 B
- 41 A
- 42 B
- 43 B
- 44 B
- 45 B
- 46 B
- 47 B
- 48 B
- 49 B
- 50 B
- 51 B
- 52 B
- 53 B
- 54 B
- 55 B
- 56 B
- 57 B
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- 84 B
- 85 B
- 86 B
- 87 B
- 88 B
- 89 B
- 90 B
- 91 B
- 92 B
- 93 B
- 94 B
- 95 B
- 96 B
- 97 B
- 98 B
- 99 B
- 100 B

Wetland Management Category

Management Categories

- A- Maintain all (existing) functional values on site. No loss of any value on site.
- B- Maintain all (existing) functional values on (existing) system. No loss of any value to region.
- C- Maintain overall functional values on (existing) system. No loss of aggregate value to region. (See use prescribed mitigation projects or bank.)
- D- Minimize loss of functional values. (Mitigation bank or project not required)
- E- Enhancement Potential

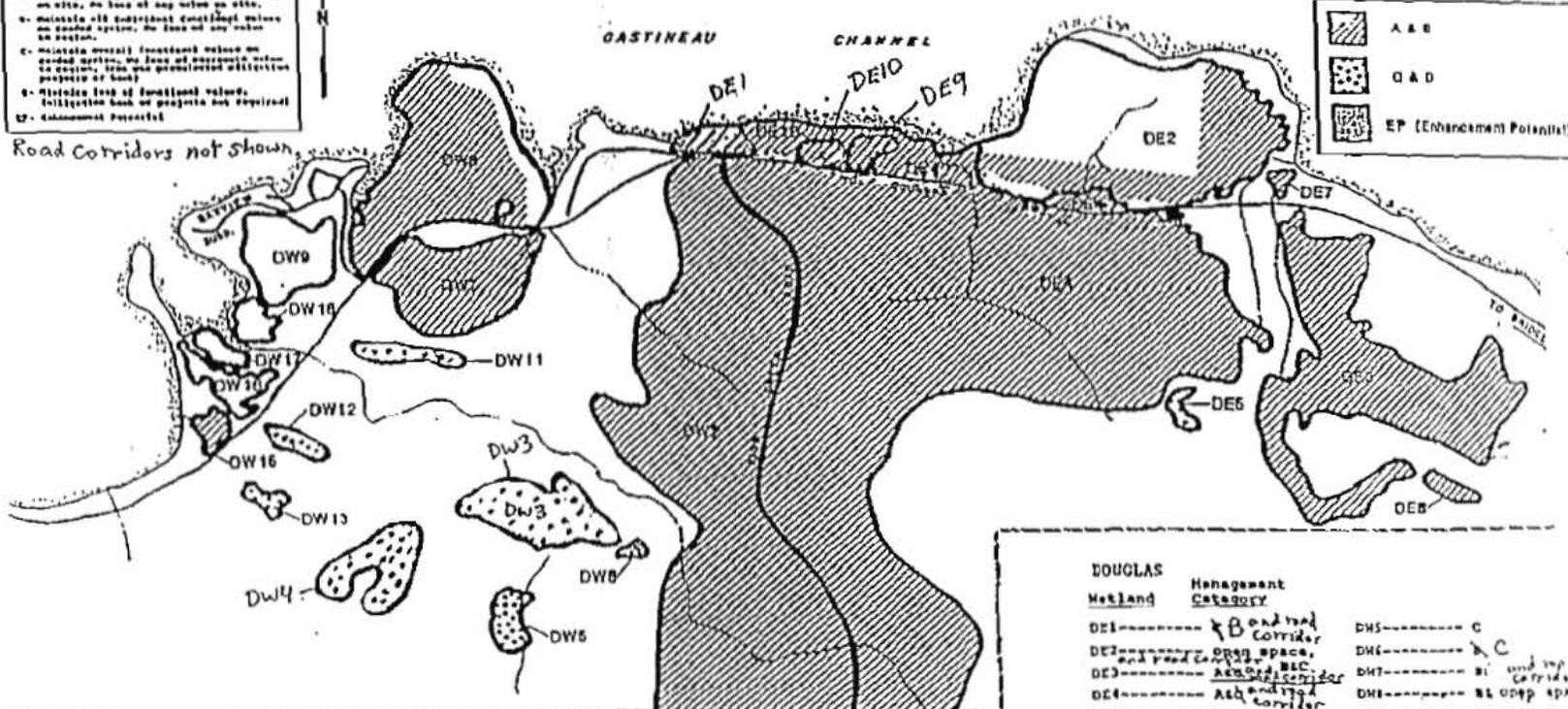
JUNEAU WETLANDS MANAGEMENT PLAN
 MANAGEMENT DESIGNATIONS



EAST VALLEY

Management Designations

1. maintain all functional wetland values on site, no loss of any value on site.
2. maintain all functional wetland values on degraded wetland, no loss of any value on site.
3. maintain overall functional values on degraded wetland, no loss of any value on site, but use appropriate mitigation projects or bank.
4. minimize loss of functional values. Mitigation bank or projects may be required.
5. Enhancement Potential



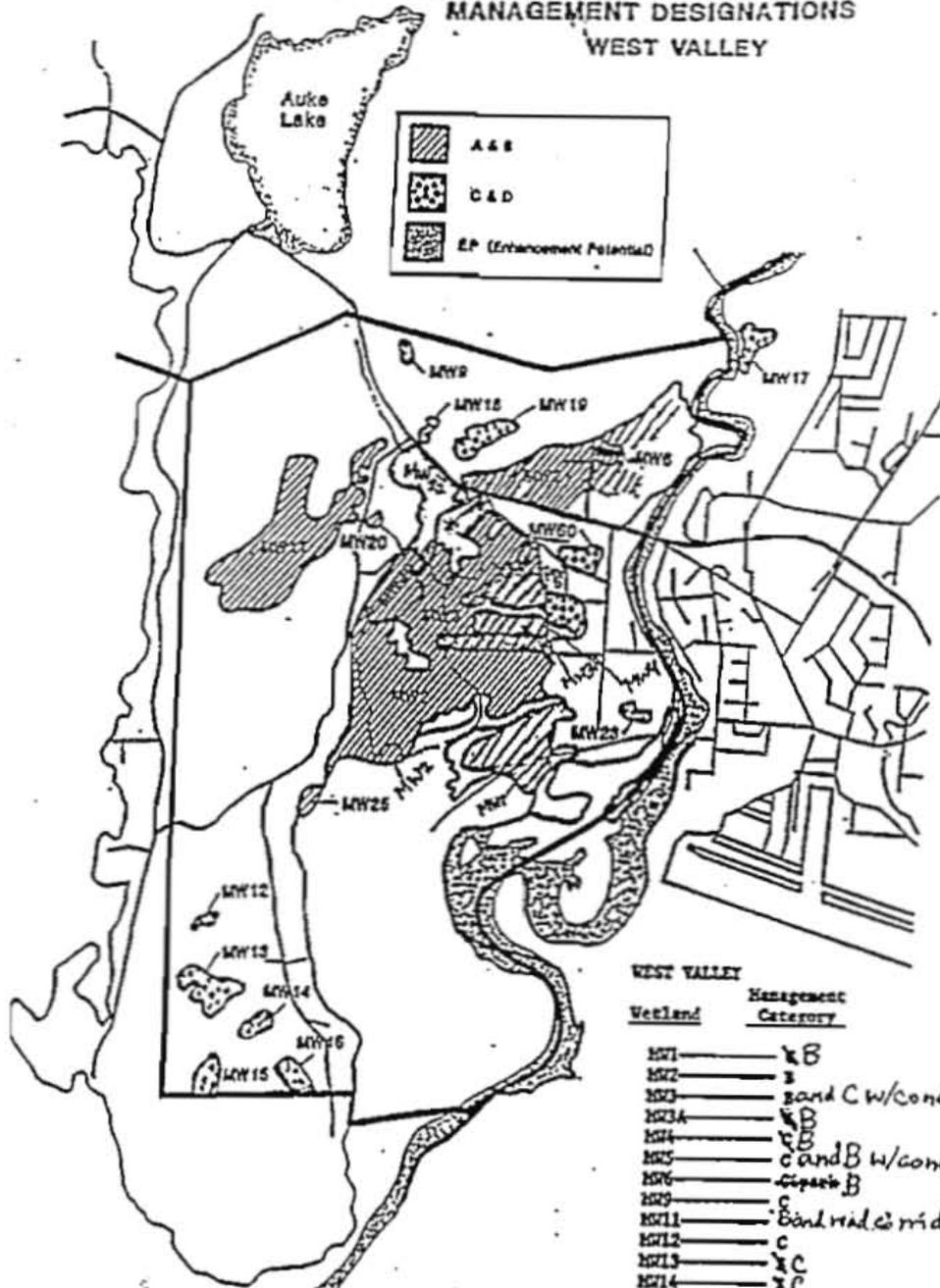
JUNEAU WETLANDS MANAGEMENT PLAN
MANAGEMENT DESIGNATIONS
DOUGLAS

| Wetland | Management Category | | |
|---------|------------------------------|------|---------------------|
| DE1 | B and road Corridor | DW5 | C |
| DE2 | open space and road Corridor | DW6 | C |
| DE3 | open space | DW7 | B and road Corridor |
| DE4 | road Corridor | DW8 | open space |
| DE5 | C | DW9 | open space |
| DE7 | B | DW10 | C |
| DE8 | red | DW11 | C |
| DE9 | B and road Corridor | DW12 | C |
| DE10 | B and road Corridor | DW13 | C |
| DW1 | road Corridor | DW14 | B |
| DW2 | road Corridor | DW15 | game refuge |
| DW3 | C | DW16 | game refuge |
| DW4 | C | DW17 | game refuge |
| DW6 | C | DW18 | game refuge |

Road corridors not shown.
 CDJ Community Development Dept. 1/91

GP 92-1

JUNEAU WETLANDS MANAGEMENT PLAN
MANAGEMENT DESIGNATIONS
WEST VALLEY



Management Categories

- A- Maintains all individual functional values on site. No loss of any value on site.
- B- Maintains all individual functional values on roaded system. No loss of any value to region.
- C- Maintains overall functional values on roaded system. No loss of aggregate values to region. Use of protected mitigation projects or bank.
- D- Maintains low of functional values. Mitigation bank or projects not required!
- EP- Enhancement Potential

Road Corridors not shown.

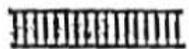
| Wetland | Management Category |
|---------|----------------------|
| MW1 | B |
| MW2 | B |
| MW3 | and C w/conditions |
| MW3A | B |
| MW4 | B |
| MW5 | C and B w/conditions |
| MW6 | and B |
| MW9 | C |
| MW11 | Bank side corridor |
| MW12 | C |
| MW13 | C |
| MW14 | C |
| MW15 | C |
| MW16 | C |
| MW17 | C |
| MW18 | C |
| MW19 | D |
| MW20 | and road corridor |
| MW21 | see connection |
| MW22 | C |
| MW23 | C |
| MW25 | B |
| MW30 | B |
| MW60 | C |

OBJ Community Development Dept. 1/81

GP 92-1

GP 92-1
 Revised 12/7/97

RESIDENTIAL ROAD CORRIDORS

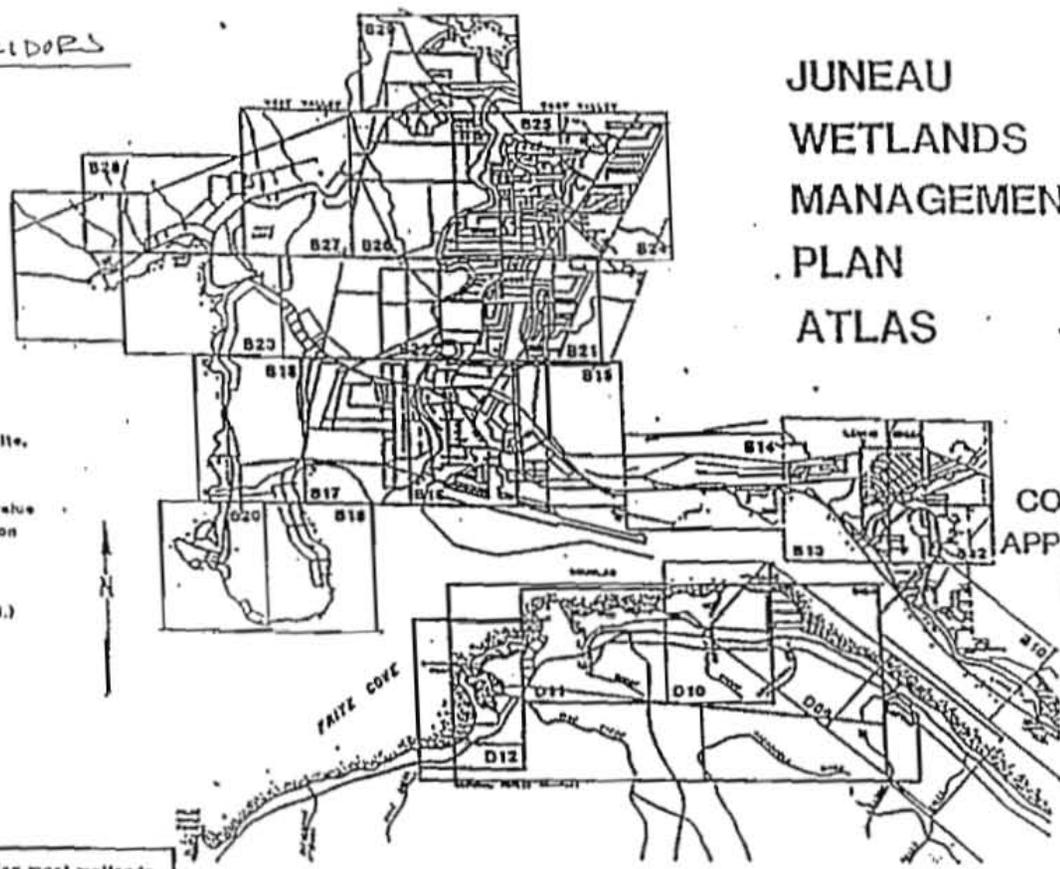
Shown as 
 Not To Scale

JUNEAU
 WETLANDS
 MANAGEMENT
 PLAN
 ATLAS

CONCEPT
 APPROVED
 DRAFT

LEGEND

- A  Maintain all individual functional values on site. No loss of any value on site.
- B  Maintain all aggregate functional values on site. No loss of aggregate value to site.
- C  Maintain overall functional value on roaded system. No loss of aggregate value to region. (Can use preselected mitigation projects or bank.)
- D  Minimize loss of functional values. (Mitigation bank or projects not required.)
-  Enhancement Potential
-  Restricted Categories



The CBJ Wetlands Management Plan Atlas includes most wetlands identified by the COE within the Adams Study Area. The boundaries are approximations based on COE aerial photography. The CBJ does not guarantee the accuracy of alignment or scale.

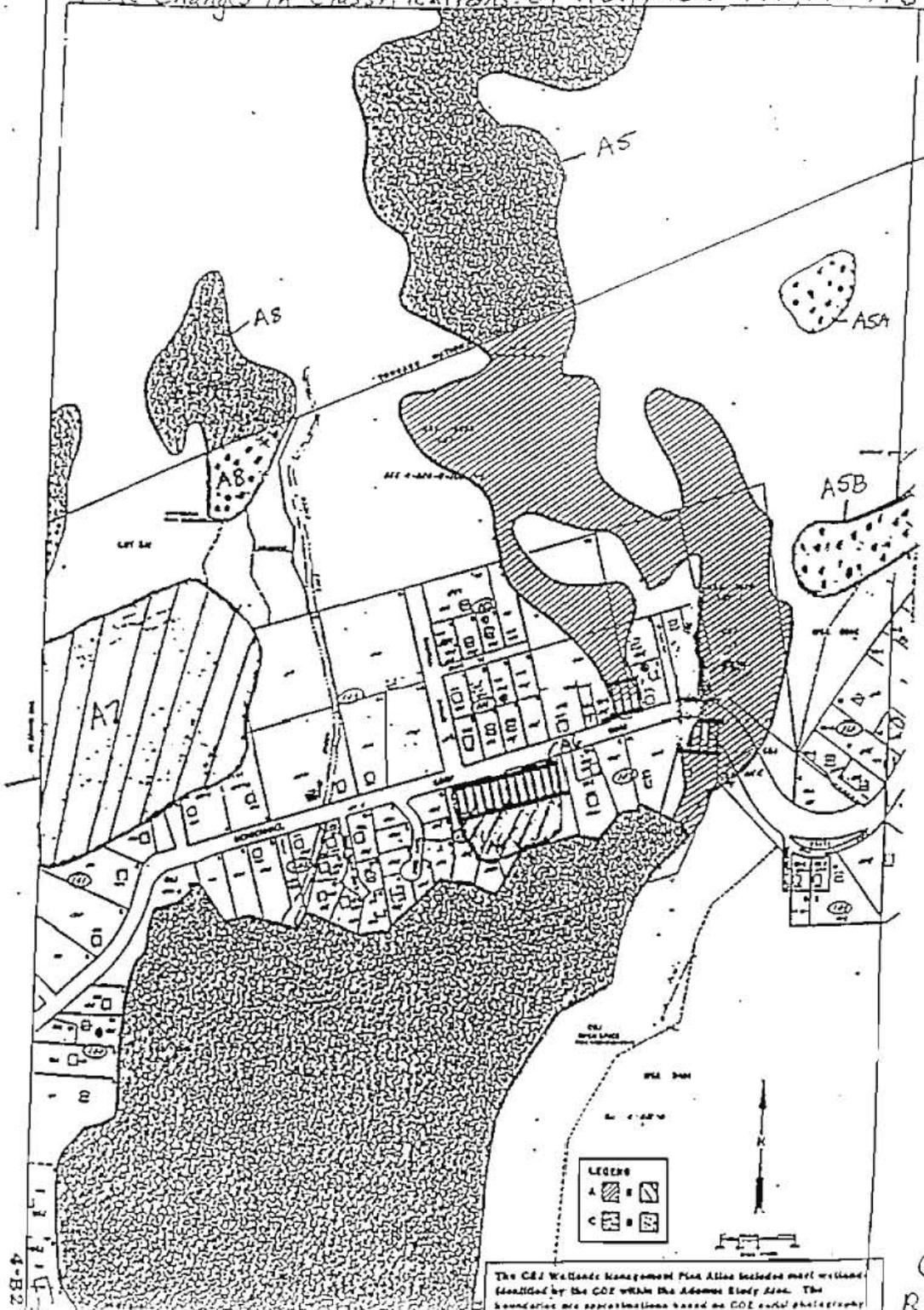
FEBRUARY 1991
 DEPT. OF COMMUNITY DEVELOPMENT

RESIDENTIAL ROAD CORRIDOR

Wetland: A5, A6

6 corridor lots (5 vacant)

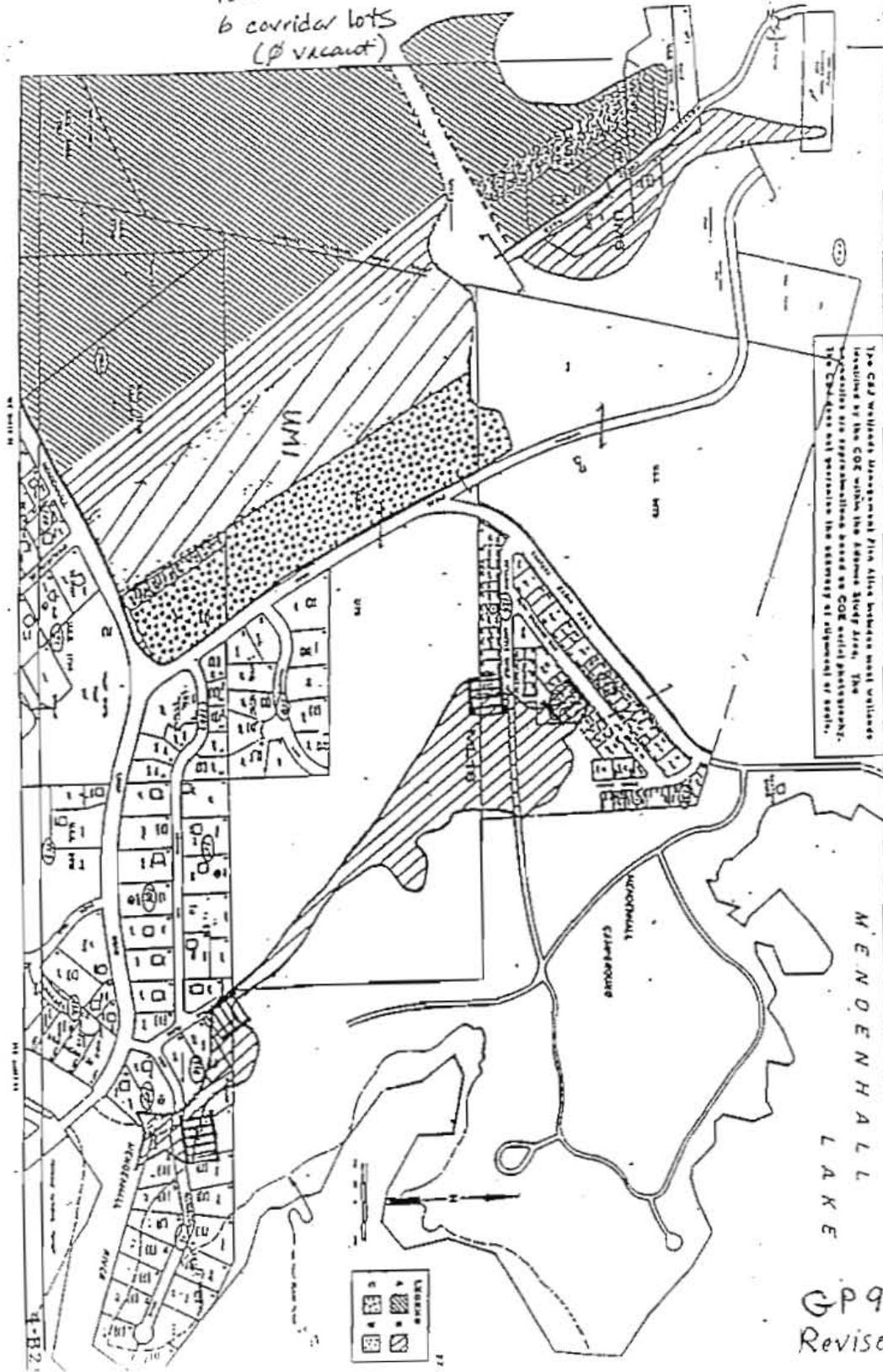
Note changes in classifications of A5, A6, A7, A8



GP92-1
Revised

RESIDENTIAL ROAD CORRIDOR

Wetland: ML 14.
6 corridor lots
(Ø vacant)



MENDENHALL
LAKE

GP92-1
Revised 12/7/92

Residential Road Corridor
 Wetland: JS
 8 corridor lots (1 vacant)

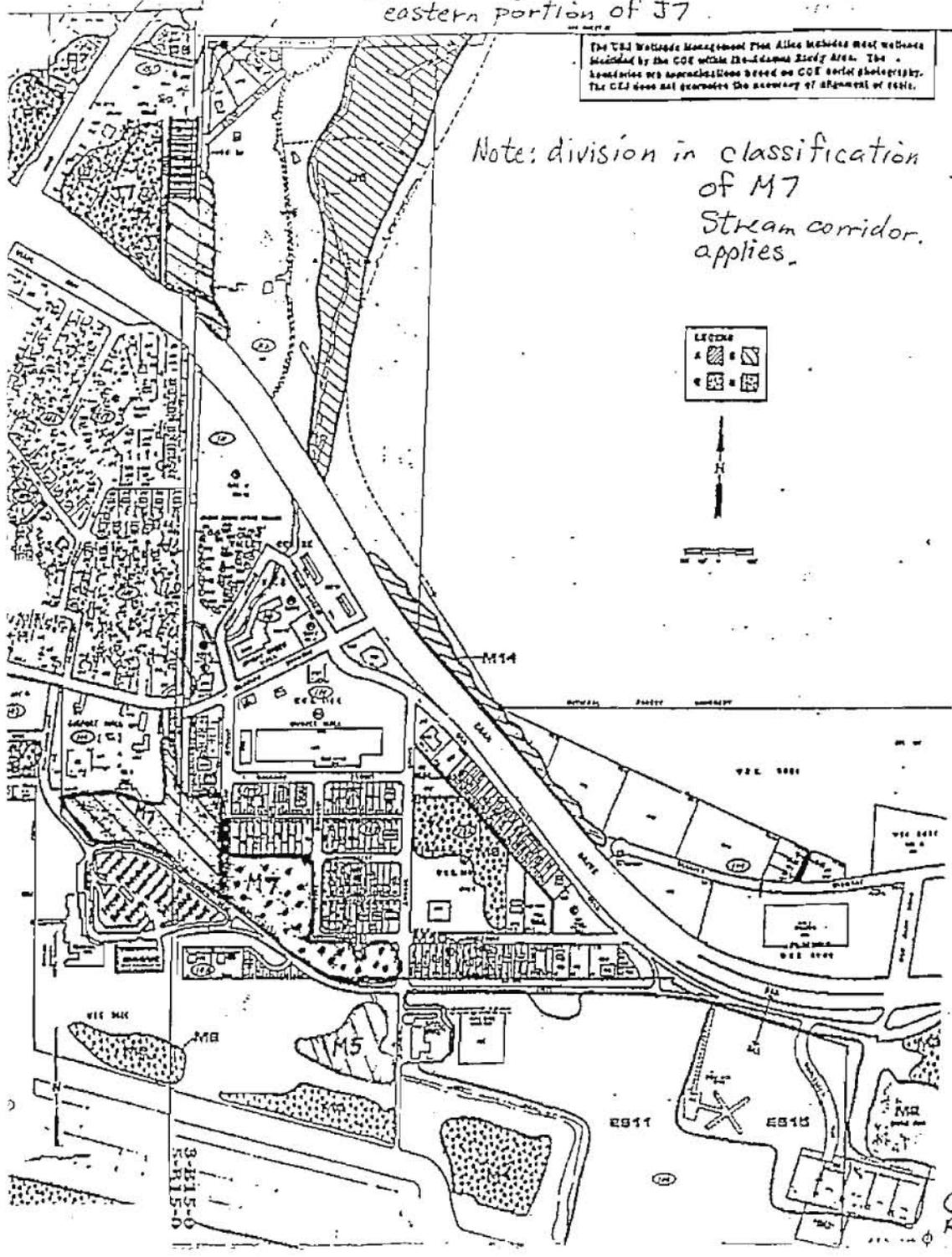


GP.92-1
 Revised

Residential Road Corridor: J7 (5 vacant lots)
 Note: change in classification of eastern portion of J7

The U.S. Wetlands Management Plan Area includes wetlands identified by the COE within the 120-Stream Study Area. The boundaries and approximations based on COE aerial photography. The CEJ does not guarantee the accuracy of alignment of wetline.

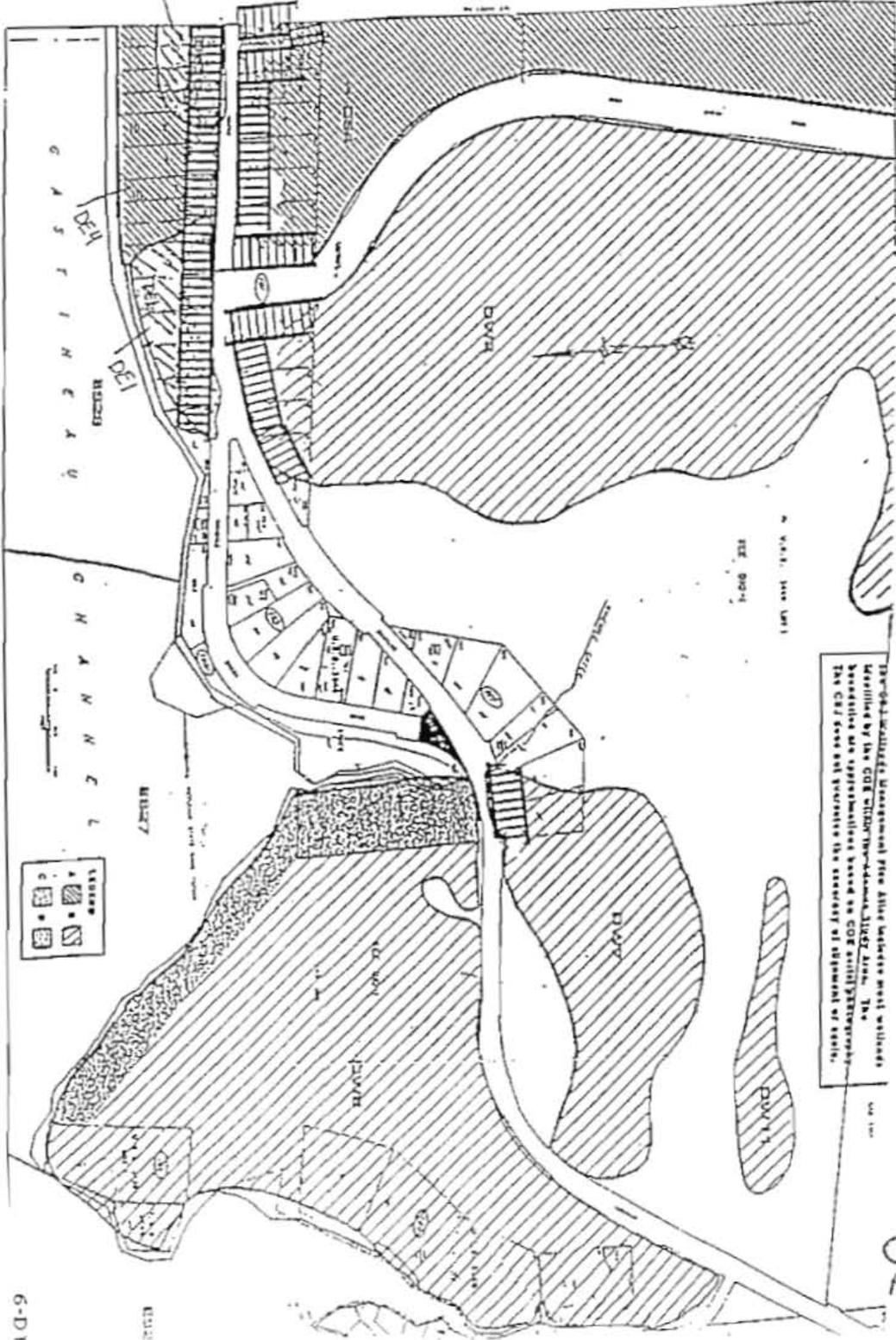
Note: division in classification of M7
 Stream corridor applies.



GP-92-1
 Revised

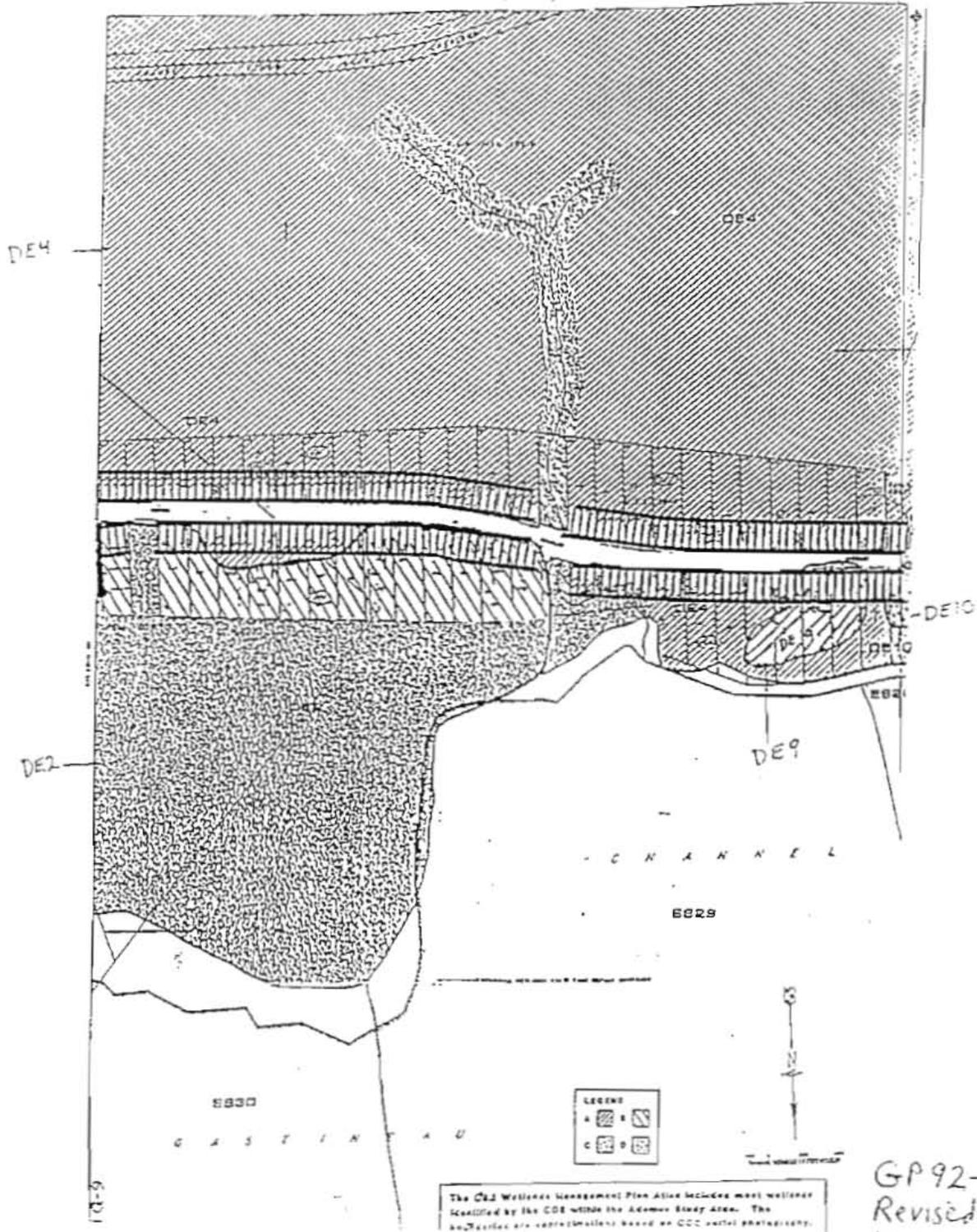
RESIDENTIAL ROAD CORRIDOR
 Wetlands: DE4, DW2, DW7,
 33 corridor lots (21 vacant)

DE1,
 DE10



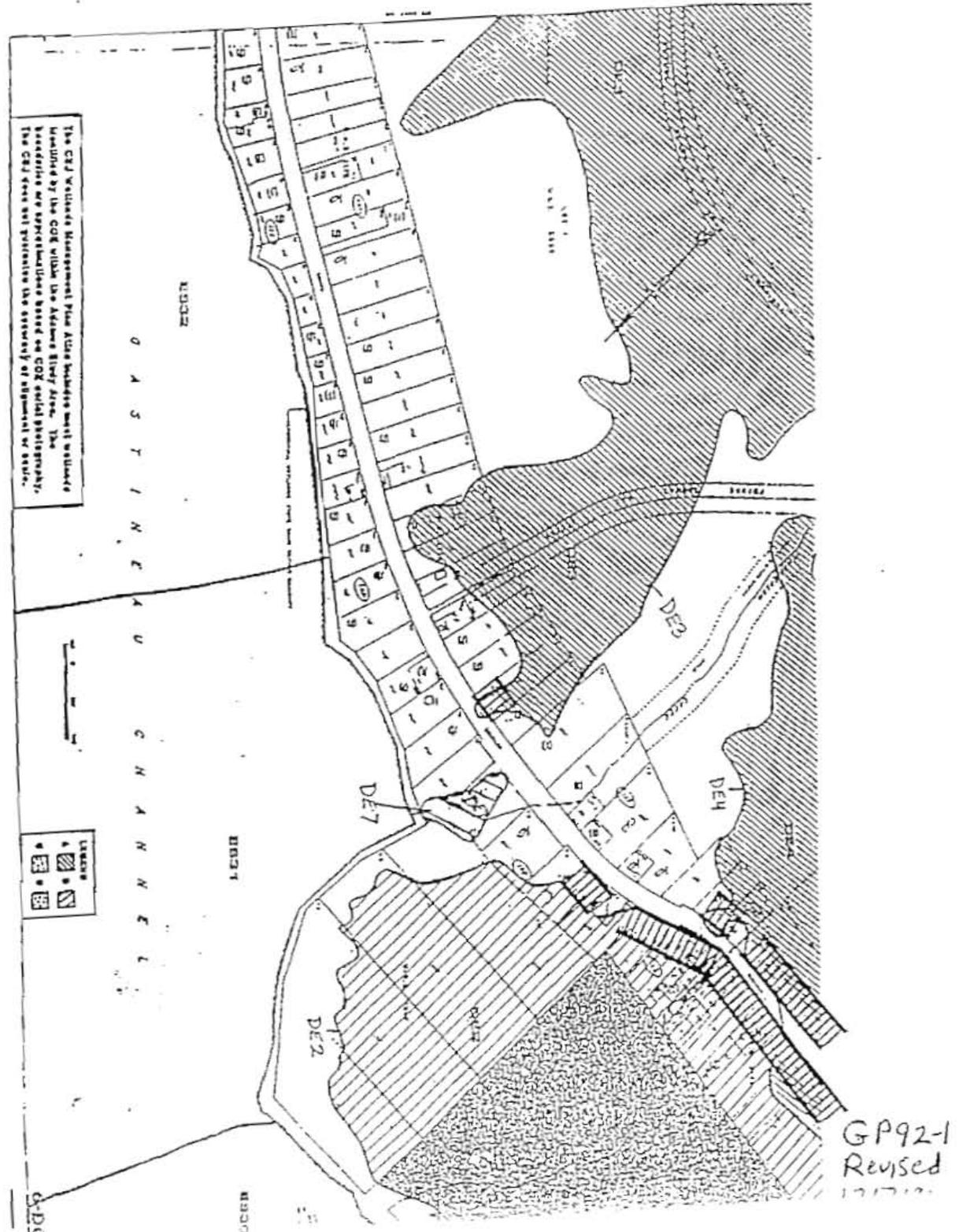
GP 92-1
 Revised
 12/7/92

RESIDENTIAL ROAD CORRIDOR
 Wetlands: DE2, DE4, DE9
 SZ Corridor Lots (21 vacant)



RESIDENTIAL ROAD CORRIDOR

Wetlands: DE 2, DE 3, DE 4
 14 corridor lots (4 vacant)



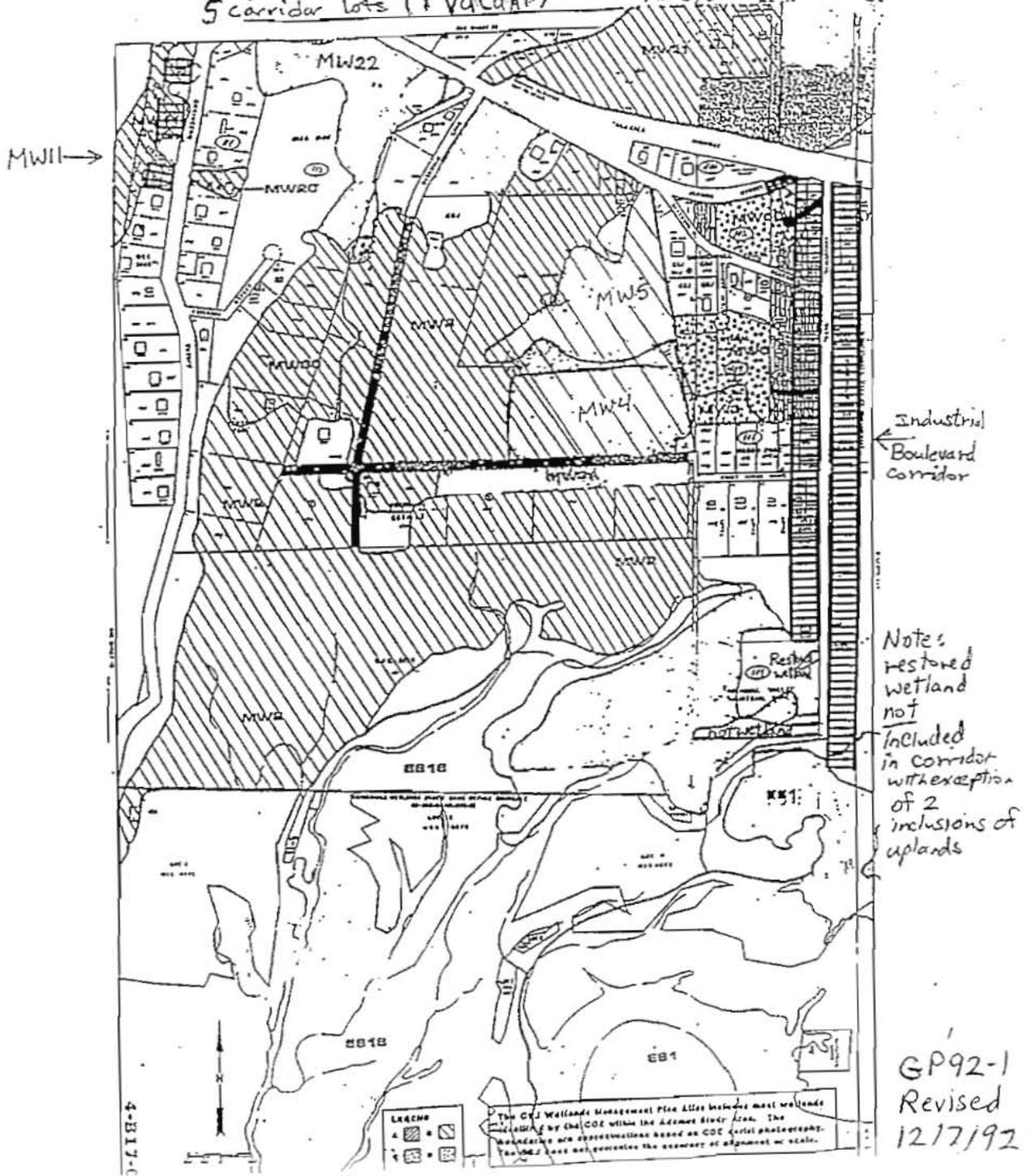
GP92-1
 Revised
 12/7/02

RESIDENTIAL ROAD CORRIDOR: and Industrial Boulevard Corridor

Wetlands: MW11, MW20

5 corridor lots (1 vacant)

Notes: divisions of MW3 and MW5, change in MW22



STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET DIVISION OF GOVERNMENTAL COORDINATION

SOUTHCENTRAL REGIONAL OFFICE
3601 "C" STREET, SUITE 370
ANCHORAGE, ALASKA 99503-2786
PH: (907) 561-6131/FAX: (907) 561-6134

CENTRAL OFFICE
P.O. BOX 110030
JUNEAU, ALASKA 99811-0030
PH: (907) 465-3562/FAX: (907) 465-3075

NORTHERN REGIONAL OFFICE
875 SEVENTH AVE., STATION H
FAIRBANKS, ALASKA 99701-4596
PH: (907) 451-2813/FAX: (907) 451-2814

Certified Mail
Return Receipt
Requested

August 21, 1992

Mary Lee Plumb-Mentjes
U.S. Army Corps of Engineers
Regulatory Branch
P.O. Box 898
Anchorage, Alaska 99506-0898

RECEIVED

AUG 23 1992

REGULATORY BRANCH
Alaska Division
Engineers

SUBJECT: CONCLUSIVE CONSISTENCY FINDING
JUNEAU WETLANDS GENERAL PERMIT
STATE I.D. NUMBER AK920803-01J

Dear Ms. Plumb-Mentjes:

The Division of Governmental Coordination (DGC) has completed coordinating the state's review of your project for consistency with the Alaska Coastal Management Program (ACMP) and has developed this conclusive consistency finding based on reviewers' comments.

This project was previously reviewed under State ID 920401-01J. On August 3rd, 1992 the U.S. Army Corps of Engineers submitted a revised application to the Division of Governmental Coordination.

This proposed general permit authorizes the placement of fill into certain wetlands in the CBJ for the purposes of wetland or habitat enhancement, residential, commercial, industrial, transportation and public use in accordance with CBJ Title 49. In addition to the restrictions described in the revised JWMP adopted by the Coastal Policy Council on October 31, 1991, no authorization for fill is granted in the general permit for the following activities: heavy industry, dry cleaning operations, hazardous waste disposal, battery transfer yards, garages, and fuel storage sites. The impacts of fill pads for other uses are similar regardless of surface use; further review and decisions concerning surface uses

Ms. Plumb-Mentjes
Juneau General Permit
State I.D. No.AK920803-01J

2

August 21, 1992

in the areas covered by the GP are appropriate to State and local government. This GP does not apply to estuaries or anadromous riverine wetlands, protective greenbelts, or any other wetland or corridor not designated C,D, or EP, or as a road corridor.

AUTHORIZATIONS

This conclusive consistency finding, developed under 6 AAC 50, applies to the following state and federal authorizations:

U.S. Army Corps of Engineers Section 404 Authorization;

Department of Environmental Conservation Section 401
Certificate of Reasonable Assurance.

Based on the review of your project by the Alaska Departments of Natural Resources, Environmental Conservation (DEC), and Fish and Game, and the City and Borough of Juneau, the State concurs with your certification that the project is consistent with the ACMP as proposed.

Advisories:

The CBJ has advised us that although the CBJ supports the changes to the airport area wetlands, there are still wetland unit designations that the CBJ would like to discuss with the Corps prior to permit issuance.

Please be advised that although the State has found your project consistent with the ACMP, based on your project description, you are still required to meet all applicable State and federal laws and regulations. Your consistency determination may include reference to specific laws and regulations, but this in no way precludes your responsibility to comply with other applicable laws and regulations.

If you have questions regarding this process, please contact me or Janet Kowalski of my staff at 465-3562.

Sincerely,


Paul C. Rusanowski, Ph.D.
Director

cc: Jan Caufield, CBJ
Rick Reed, ADF&G
Elena Witkin, ADEC
Chris Landis, ADNR

WALTER J. HICKEL, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

SOUTHEAST REGIONAL OFFICE
410 Willoughby Avenue, Suite 105
Juneau, AK 99801-1795

PHONE: (907) 465-5350
FAX: 465-5362

RECEIVED

June 16, 1992

JUN 22 1992

REGULATORY FUNCTIONS BRANCH
Alaska District, Corps of Engineers

Mary Lee Plumb-Mentjes
U.S. Army Corps of Engineers
Regulatory Branch
P.O. Box 898
Anchorage, AK 99506-0898

CERTIFIED MAIL RETURN RECEIPT
REQUESTED

P 456 619 987

RE: Juneau Wetlands General Permit
AK920401-01J

In accordance with Section 401 of the Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation has issued the enclosed Certificate of Reasonable Assurance for the proposed general permit authorizing placement of fill into certain wetlands in the City and Borough of Juneau.

This Department action represents only one element of the overall project level coastal management consistency determination issued by the Office of Management & Budget under AS 44.19 and 6 AAC 50.070.

Department of Environmental Conservation regulations provide that any person who disagrees with this decision may request an adjudicatory hearing by filing a statement of issues under 18 AAC 15.200-310. The request for an adjudicatory hearing shall be limited to a statement of water quality-related issues only. The hearing request should be mailed or hand delivered to the Commissioner of the Alaska Department of Environmental Conservation, 410 Willoughby Avenue, Juneau, AK 99801. Failure to submit a hearing request within thirty (30) days of receipt of this letter constitutes a waiver of your right to judicial review of this decision.

Sincerely,



Dick Stokes
Southeast Regional Administrator

Enclosure

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, as required by Section 401 of the Clean Water Act, has been requested by the Alaska District, Corps of Engineers, P.O. Box 898, Anchorage, Alaska 99506-0898 for the proposed issuance of a general permit authorizing the placement of fill into certain wetlands in the City and Borough of Juneau (CBJ) for the purposes of wetland or habitat enhancement, residential, commercial, industrial, transportation and public use in accordance with CBJ Title 49. In addition to the restrictions described in the revised Juneau Wetlands Management Plan adopted by the Coastal Policy Council on October 31, 1991, no authorization for fill is granted in the general permit for the following activities: heavy industry, dry cleaning operation, hazardous waste disposal, battery transfer yards, garages, and fuel storage sites. The impacts of fill pads for other uses are similar regardless of surface use; further review and decisions concerning surface uses in the areas covered by the general permit are appropriate to State and local government. This general permit does not apply to estuaries or anadromous riverine wetlands, protective greenbelts, or any other wetland or corridor not designated C, D or EP, or as a road corridor.

The proposed activity is located in the City and Borough of Juneau, Alaska.

Public notice of application for this certification has been made in accordance with 18 AAC 15.180.

Water Quality Certification is required for the proposed activity because the activity will be authorized by a Department of the Army general permit and a discharge may result from the proposed activity.

Having reviewed the application and comments received in response to the public notice, the Alaska Department of Environmental Conservation certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, is in compliance with the requirements of Section 401 of the Clean Water Act which includes the Alaska Water Quality Standards, 18 AAC 70, and the Standards of the Alaska Coastal Management Program, 6 AAC 80.

6-16-92
Date

Dick Stokes
Dick Stokes
Southeast Regional Administrator



US Army Corps
of Engineers
Alaska District

Public Notice

DATE: 24 July 2000

Regulatory Branch (1145b)
Juneau Field Office
Suite 106B
8800 Glacier Highway
Juneau, Alaska 99801

**IDENTIFICATION Nos.: GP 2000-01, GP 2000-02,
GP 2000-03, and GP 2000-04**

In reply refer to above Identification Number(s)

GENERAL PERMITS 2000-01, 2000-02, 2000-03 2000-04
General Permits for the City and Borough of Juneau, Alaska

The District Engineer, Alaska District, U.S. Army Corps of Engineers has issued four General Permits (GP): 2000-01, 2000-02, 2000-03, and 2000-04, under the authority of Section 404 of the Clean Water Act (Public Law 95-217, 33 U.S.C. 1344 et. seq.), for the mechanized landclearing and for the discharge of fill material into waters, including wetlands, of the United States, within the City and Borough of Juneau (CBJ) Alaska.

In response to Special Public Notice 00-03, dated April 28, 2000, the four proposed GPs 2000-01, 2000-02, 2000-03, and 2000-04 were revised to reflect comments submitted by local, State, and Federal agencies, and the interested public. Based on a review of all pertinent information, including a prepared Environmental Assessment, I have concluded that issuance of this permit will not have more than minimal adverse impact on the environment and is not contrary to the public interest.

Several changes have been made See CHANGES FROM GP 92-01, in the attached GP document.

These GPs will authorize the discharge of fill material into waters of the United States, including wetlands, for the purpose of creating foundation pads for structures, utilities, associated roads, driveways, parking areas, and other domestic, governmental, and commercial development, as well as enhancement of certain environmental situations. These GPs authorize mechanized landclearing and other activities that could result in a re-deposition of fill material.

The wetland units covered by these GPs, as described in the original GP 92-01, have been mapped on the CBJ Street Atlas. Maps showing the areas subject to authorization under these GPs, and areas specifically excluded from the GPs, are available for public use at the CBJ Department of Community Development, 155 South Seward Street, Juneau, Alaska, 99801-1397, telephone (907) 586-5235; and at the Alaska District, Corps of Engineers, Regulatory Branch, Juneau Field Office. Please note that these GPs will result in slight changes to those maps. The areas excluded from the GPs' coverage will be subject to an individual permit review. All authorized activities must be in accordance with the conditions of the GPs, a copy of which is attached. Failure to comply with the terms and conditions of these permits could result in suspension, modification, or revocation of the permit, and/or imposition of penalties as provided by law.

GPs 2000-01, 2000-02, 2000-03, and 2000-04 will be valid for a period of five years effective the date of this public notice. The District Engineer may at any time during this five-year period, alter, modify, suspend, or revoke this permit if he deems such action to be in the public interest.

Any comments or request for additional information should be directed to: Alaska District, Corps of Engineers, ATTN: Mr. John C. Leeds, III, Project Manager, Juneau Field Office, U.S. Army Corps of Engineers, Suite 106, 8800 Glacier Highway, Juneau,

Alaska 99801-8079, or contact Mr. Leeds at (907) 790-4490, or by FAX at (907) 790-4499

District Engineer
U.S. Army, Corps of Engineers

Attachments

GENERAL PERMITS 2000-01, 2000-02, 2000-03, 2000-04

Four General Permits (GP) 2000-01, 2000-02, 2000-03, and 2000-04, previously issued cumulatively as GP 92-1 on June 30, 1995, have been issued by the Alaska District, Corps of Engineers (Corps), in accordance with Title 33 CFR 325.2 (e)(2), as published in the Federal Register, Volume 51, Number 219, pursuant to Section 404 of the Clean Water Act (PL 95-217, 33 U.S.C. 1344), and authorize the mechanical land clearing of wetlands, and the placement of fill and/or dredged fill material into wetlands within the City and Borough of Juneau (CBJ) which have been designated 'C', 'D', 'EP', or as 'Road Corridors' in the Juneau Wetlands Management Plan (JWMP), dated February 1991, and adopted in revised form by the Coastal Policy Council on October 31, 1991, and as approved for incorporation into the Federally approved Alaska Coastal Management Plan (ACMP) pursuant to 15 C.F.R. 923.84, effective November 23, 1993 (see Attachment 1 for the list of approved management categories). All previous changes and revisions have been incorporated into the revised JWMP, dated February 1997. New changes to the GP and the JWMP are described below.

ACTIVITY These GPs authorize the placement of fill into certain wetlands in the CBJ

GP 2000-01 is for residential fill pads, site preparation, and driveways. Residential development is defined as the construction of single, attached and multi-family dwellings, a subdivision; a place used exclusively for human habitation; a person's fixed, permanent, and principal home for legal purposes. Residential development also includes work performed in association with the installation of driveways and of a dwelling's septic/sewer system. See CBJ Land Use Code, Title 49.

GP 2000-02 is for commercial, community and institutional development. Commercial development is defined as the construction of private facilities for the exchange or buying and selling of commodities. Commercial development structures include movie theaters, pool halls/arcades, video tape rentals, bingo halls, hotels/restaurants, hair salons, tanning salons, fabric/dress shops, daycare/baby-sitting facilities, lumber and hardware stores, etc. Public, or institutional, development is defined as the construction of facilities relating to business or community interests as opposed to private interests. Public development includes city halls, church buildings, post offices, fire stations, and similar projects. See CBJ Land Use Code, Title 49.

GP 2000-03 is for wetland functional enhancement projects See CBJ Land Use Code Title 49.

GP 2000-04 is for roads and other linear developments. New roads authorized by this GP include residential streets, alleys and collector streets, not arterials. Roads authorized by this GP shall be the minimum width necessary but no more than 75 feet width, including the right-of-way clearing. The only other linear developments authorized by this GP shall be utility lines, including water, gas, electricity, and cable. See CBJ Land Use Code, Title 49.

In addition to the restrictions described in the revised JWMP adopted by the Coastal Policy Council on October 31, 1991, and as approved for incorporation into the Federally approved Alaska Coastal Management Plan (ACMP) pursuant to 15 C.F.R. 923.84, effective November 23, 1993, no authorization for fill is granted by these GPs for the following activities: heavy industry, dry cleaning operations, battery transfer yards, commercial auto repair garages, fuel storage sites, hazardous waste management facilities, service stations, landfills, petro-chemical plants, or other projects involving the manufacture, storage, or disposal of waste/toxic substances. All activities built under these GPs shall conform to the CBJ Land Use Code. The impacts of fill pads for other uses are similar regardless of surface use; further review and decisions concerning surface uses in the areas covered by these GPs are appropriate to State and local government. These GPs do not apply to estuaries or anadromous riverine wetlands, protective greenbelts, or any other wetland or corridor not designated C, D, or EP, or as a Road Corridor. Mitigation activities, involving

either land clearing and/or the discharge of dredged or fill material into waters, including wetlands, of the United States, not administered by this GP, will require a separate Department of the Army authorization. These GPs are based on the JWMP, dated

February 1991, with the inclusion of revisions approved by the Coastal Policy Council on October 31, 1991, the revised list of wetland unit classifications with special conditions in the attachment to these GPs, the maps in the Juneau Wetlands, Functions and Values, Map Appendix, dated September 1987, the revised list of wetland unit classifications with special conditions and maps provided in the February 1997 revision of the JWMP, and will include the changes described below. These GPs will not be altered by any change in the CBJ's Plan unless the District Engineer determines that an alteration is not contrary to the public interest following a public interest review of the proposed change or alteration, and the GP is subsequently modified to incorporate these revisions.

CHANGES FROM GP 92-01

1. Wetland Units M49, M51 and M53 have been re-classified from Category C wetlands to Category A. An individual Department of the Army permit will be required prior to the discharge of fill into these wetlands.

2. The Shoreline Corridor Designation Rule has been changed such that all catalogued anadromous fish streams shall be classified at the highest value, Category A wetland type. The corridor boundary shall extend 100 feet landward from the ordinary high water mark. In addition, there shall be a 100-foot shoreline corridor around certain lakes, measured from the ordinary high water mark of the shoreline. See the Attachment to General Permits 2000-01, 2000-02, 2000-03 and 2000-04 below, for clarification

PROCEDURE: All applicants desiring to mechanically clear, or discharge dredged and/or fill material into United States waters under the terms of these GPs will submit an application to the CBJ Department of Community Development. The application will require descriptions of the location, proposed activity, purpose and need. The description will include quantities of fill, acreage of disturbed surface area, steps that the applicant proposes to take to comply with the mitigation policies of the JWMP, source of fill, and offsite disposal locations, supported by applicable drawings and narrative.

The CBJ will determine if the proposed mechanical land clearing, or discharge of dredged and fill material meets local permit requirements and is consistent with the criteria of the GP. In all cases the CBJ will proceed with its review as soon as it receives an application. The CBJ's determination of consistency is advisory, is not legally binding as to authorization under a particular GP, and does not constitute issuance of or authorization under the GPs.

For projects that would involve mechanically clearing, or filling between five and ten acres of wetlands, the CBJ will provide the Corps with a copy of the application; the Corps shall determine which GP applies and whether any additional special conditions shall be added to protect the Federal interest. The Corps shall have 15 days in which to make this determination. In reviewing an activity under the notification procedure, the District Engineer will determine whether the activity will result in more than minimal individual or cumulative adverse environmental effects or will be contrary to the public interest. The Corps shall notify the CBJ of its determination.

For projects that would involve mechanically clearing, or filling more than ten acres of wetlands, the CBJ will provide the application to the Corps, who shall determine within 30 days of receipt of a complete application whether one or more of the GPs apply, or if the proposed project requires an individual Department of the Army permit. The Corps shall notify the CBJ of its determination. If the proposed action meets the GPs' qualifications, the application would be returned to the CBJ.

For projects that would involve mechanically clearing, or filling five or less acres of wetlands, the CBJ will determine whether the proposed activity is located in areas designated as Road Corridors or classified as a C, D, or EP wetland and meets the criteria of one or more of the GPs. Upon issuance of the necessary CBJ Wetland Permit and other CBJ Title 49 Planning and Zoning permits, no further Corps action is required to proceed under one or more of these GPs. As is currently the case, the CBJ will require that all necessary municipal authorizations be obtained before the requested mechanical land clearing, or discharge of dredged and fill material can proceed. Relative to the GPs, the Corps retains its full legal authority and may suspend use of or find a violation of the GPs at any time it determines that an activity is not in compliance with the GPs, even if the CBJ has advised an applicant the activity meets the criteria of the GP's.

Authorization to proceed will require fulfillment of the general conditions specified here and of the special conditions applicable to particular sites as noted in the attachment to this notice, as well as fulfillment of any additional special conditions included in the CBJ Wetland Permit, as determined by the CBJ Wetlands Review Board. At the time of the issuance of the local authorization, the CBJ will give a copy of the conditions for these GPs to the individual.

The CBJ authorization of the CBJ Wetland Permit would expire in eighteen months, if no other required CBJ permits have been issued, or no substantial construction progress has been made pursuant to these local permits, unless otherwise specified in the CBJ Wetland Permit. For any partially completed work, the permittee shall restore the site to pre-project conditions or apply for an extension or reauthorization under the GP from the CBJ.

INDIVIDUAL AUTHORIZATIONS: Any project which has any local authorization denied, will be closed, and an application for an individual DA permit will not be accepted by the Corps. The Corps retains the final review and authority to determine compliance of a given activity with the GP. The CBJ is expected to confer with the Corps in questionable or borderline proposals before the requisite local authorization to proceed under the GP is issued.

REPORTING: The CBJ shall compile information on authorizations issued under this GP and provide the Corps with the following information on a quarterly basis: copies of all applications and authorizations made under each GP for each quarter. Reports shall be submitted to the District Engineer by the following dates: April 10 (for January 1- March 31), July 10 (for April 1-June 30), October 10 (for July 1-September 30), and January 10 (for October 1- December 31).

The CBJ will submit to the District Engineer once a year the following information: total acreage permitted for mechanical land clearing, or discharge of dredged and fill material, number of permits granted for each GP, average permit processing time, and enforcement activities. In addition, if the CBJ adopts and implements a mitigation banking plan, a copy of the appropriate wetland mitigation bank annual report will be submitted to the District Engineer.

IMPLEMENTATION: Implementation will be in accordance with the JWMP of February 1991, as amended by the Coastal Policy Council on October 31, 1991, and the site-specific changes described in this document, and in the revised JWMP, dated February 1997, and the CBJ implementing ordinance.

DURATION: These GPs are in effect for a period of 5 years. At the end of the 5-year period, an evaluation of the program will be made and at that time it will be decided whether one or more of these permits should be renewed.

MAPS AND JURISDICTIONAL BOUNDARIES: These GPs are based on the revised JWMP, dated February 1997, with the inclusion of revisions approved by the Coastal Policy Council on October 31, 1991, the revised list of wetland site classifications with special conditions attached to the original GP, and the maps in the Juneau Wetlands, Functions

and Values, Map Appendix, dated September 1987. The procedure for situations where the wetland designation or classification is in question and needs a more definitive jurisdictional determination consists of requesting field verification from the District Engineer. The wetland units covered by these GPs have been mapped on the CBJ Street Atlas. This Atlas is available for review from the CBJ Department of Community Development, 155 South Seward Street, Juneau, Alaska, 99801-1397; telephone (907) 586-5235. Please note the changes to the JWMP, resulting from the changes in the Shoreline Corridor Rule.

VERIFICATION: These GPs do not require notification to the District Engineer prior commencement of the authorized activity, nor do they require confirmation from the District Engineer that a proposed activity is in full compliance with all terms and conditions of this GP as authorized.

Nevertheless, a General Permittee may choose to request in writing a verification that his proposed activity is authorized by a specific GP, by writing to the Alaska District, Corps of Engineers, Regulatory Branch, Juneau Field Office, Suite 106, 8800 Glacier Highway, Juneau, Alaska 99801-8079. Any written inquiry must include the following information:

- 1 Name, address and telephone number of the applicant;
- 2 Location of the proposed work;
- 3 Brief description of the proposed work listed in the earlier Procedures Section of the specific GP;
- 4 Identification of the GP or permits which apply to the proposed work; and Any other information that the applicant believes is appropriate.

If the General Permittee's written request for verification is complete, accurate and made in good faith, and the Corps does not respond to such inquiry within 20 days after the Corps receives such inquiry, the General Permittee may proceed with the activity, provided all necessary CBJ permits are obtained. The General Permittee's authorization can only be suspended, modified or revoked in accordance with the procedure set forth in 33 CFR 325.7. If the Corps later determines that the General Permittee's written request for verification was inaccurate, incomplete or made in bad faith, and that the activity was not in fact authorized by the GP, the Federal Government may bring an appropriate enforcement action under 33 CFR Part 326.

GENERAL CONDITIONS: All authorizations issued under these GPs are subject to the following conditions

1. The amount of fill authorized by these GPs shall not exceed the amount authorized by the CBJ in its wetland permit.
2. Activities authorized under these GPs shall not adversely impact adjacent estuarine, riverine, or **A** and **B** wetlands by causing ponding, drainage, siltation or inadvertent fill. The use of culverts or other methods may be required to ensure compliance with this condition. Shoreline corridors shall be designated measuring 100 feet landward (inclusive) of the ordinary high water mark of anadromous fish streams and lakes. This corridor will be classified as Category A Wetlands (see Shoreline Corridor Rule).
3. All fill material authorized under these GPs shall be free from toxic pollutants in toxic amounts, as defined by Alaska State law.
4. Upon completion of earthwork operations, all exposed slopes, fills and disturbed areas shall be properly stabilized, by appropriate means such as landscaping, or planting and maintaining vegetative cover to prevent subsequent erosion. All disturbed soil areas (exposed soils) shall be revegetated within the next growing season. Natural revegetation is acceptable if the site will be revegetated itself within the next growing season. If natural revegetation is not successful, additional measures shall be taken to ensure compliance with this condition, such as interim protective cover until natural regrowth occurs.

5. No borrow material may be obtained within 330 feet of an eagle nest. This does not absolve the applicant from responsibilities to protect bald eagles under provisions of the Bald Eagle Protection Act.

6. No borrow material may be obtained from an estuarine riverine, A or B wetland activities covered under these GPs.

7. These GPs do not apply for activities currently covered by a Nationwide Permit. No additional authorization is required for Nationwide-Permitted activities

8. The permittee must maintain the structure or work authorized by these GPs in good condition and in conformance with the terms and conditions of the specific GP. The permittee is not relieved of this requirement if the permittee abandons the permitted activity, although the permittee may make a good faith transfer to a third party. Should the permittee wish to cease to maintain the authorized activity or should the permittee desire to abandon it without a good faith transfer, the permittee must obtain a modification of this permit from this office, which may require restoration of the area.

9. All activities conducted under these GPs (including the use of new borrow sites) shall not take place in or adversely affect any existing historical properties listed or eligible for listing in the National Register of Historic Places or any historical properties found to be listed or eligible for listing on the National Register of Historic Places subsequent to the issuance of these GPs. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, the permittee must immediately notify the Corps regarding the find. The Corps will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

10. The permittee must comply with any conditions specified as part of the State water quality certification, which is part of these GPs.

11. Methods shall be implemented to filter or settle out suspended sediments from all construction-related wastewater prior to its direct or indirect discharge into a natural body of water.

12. Design plans for any stormwater collection system to be placed into or associated with the authorized fill must be approved by the Alaska Department of Environmental Conservation prior to system construction or fill placement.

13. Measures shall be implemented to attenuate flows, remove oil, grease, and other petroleum products from the project's stormwater collection system, if one is required by the Alaska Department of Environmental Conservation.

14. Design plans for any on-site sewage disposal system associated with the proposed fill must be approved by the Alaska Department of Environmental Conservation prior to construction.

15. The permittee must allow the District Engineer, or his designated representatives, to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of these GPs.

16. These GPs shall not apply to any activity or uses which would involve the storage or use of hazardous materials or substances as part of their principal purpose. These materials are defined in the Resource Conservation and Recovery Act and the Comprehensive Environmental Response and Liability Act.

17. All activities authorized under these GPs must meet a clearly demonstrated need. The CBJ review and building permit shall be instrumental in this respect to help prevent speculative projects and/or those contrary to the general public interest.

18. The applicant must design his proposed project so as to minimize the area of wetlands needed to be filled.

19. Equipment Operation and Marking of Footprint: Prior to initiation of construction, the permitted project footprint and any applicable waterbody setbacks, wetland buffers, and/or other avoidance areas shall be clearly delineated, using stakes, flags, fencing, or other similar measures. No equipment used for activities permitted under these GPs shall be operated, stored, or serviced in wetlands, and no mechanized land clearing or discharge of fill material may occur, even temporarily, in wetlands or other waters beyond the project footprint or within avoidance areas.

20. All activities identified and authorized herein shall be consistent with the terms and conditions of the appropriate GP, and activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of that GP which result in the modification, suspension or revocation of any authorization in whole or in part, and in the institution of such legal proceedings as the United States Government may consider appropriate.

21. All activities authorized herein shall be conducted in a manner that is consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards, and management practices established pursuant to the Clean Water Act (PL 95-217 33 U.S.C. 1344), the Marine Protection, Research and Sanctuaries Act of 1972 (PL 92-532: 86 Stat. 1052) and pursuant to applicable State and local law.

22. The activity shall not jeopardize the continued existence of a threatened or endangered species, as identified under the Endangered Species Act, or endanger the critical habitat of such species.

23. The permittee shall implement the construction or operation of the work authorized herein in a manner so as to minimize adverse impact on fish, wildlife and natural environmental values. The project shall include all measures imposed by the CBJ Wetland Review Board to mitigate the adverse impacts of the work consistent with the enforceable policies of Chapter 3 of the JWMP, dated February 1991, as revised by the Coastal Policy Council on October 31, 1991.

24. These GPs shall not apply to mitigation activities involving either land clearing and/or the discharge of fill into estuaries or anadromous riverine wetlands, protective greenbelts, or any other wetland or corridor not designated C, D, or EP, or as a Road Corridor. For these situations, a Department of the Army permit application must be submitted to the Corps.

SPECIAL CONDITIONS: (pertaining to specific wetland unit designations in the JWMP)

1. **UM1:** Portions of the Category C area shall be retained undisturbed through a site plan review process that shall consider: (a) siting residences to the extent practicable to maximize use of the non-wetland areas or lower value wetland areas that occur within the unit; (b) restricting fill associated with the residences, driveways and roads to the minimum amount necessary to achieve project purposes; (c) use of site plan techniques to consolidate development. The area shall be retained in a low-density residential zoning (D1, D3, or D5). Construction mitigation techniques shall be used to avoid impacts to portions of the wetlands that shall not be developed. The CBJ staff shall consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

2. **M7, M9, M10, and M13:** If development is proposed in wetland units M7, M9, M10, or M13, the applicant shall be required to conduct mitigation to support and enhance the functioning of Jordan Creek in the area owned by the CBJ in Wetland Unit M7. The "Juneau Creeks Greenbelt Study", prepared by the CBJ with the assistance of the Alaska Department of Fish and Game in January 1984, lists possible mitigation projects for this section of Jordan Creek. These projects could be pursued as mitigation.

3. M9: Development of Wetland Unit M9 shall involve a site plan that shall consider: (a) restricting fill to the minimum amount necessary to achieve stated project purposes; (b) consolidating development; and (c) if development of the wetland is to occur in phases, the lower value areas shall be developed first to the extent practicable.

Construction mitigation techniques shall be used to avoid impacts to the portion of the wetland that is not developed. This should include maintaining the hydrologic connection to the undisturbed portion of the wetland through Wetland Unit M10. The CBJ staff shall consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

4. M49, M51, M53: These wetland units are re-classified as A wetlands. An individual Department of the Army permit will be required prior to the discharge of material into these wetlands previously categorized as C wetlands in the JWMP.

5. MW5: Fill shall be restricted to the minimum amount necessary to achieve project purposes and measures shall be taken to avoid impacts to portions of the wetland not developed. Applicants shall conduct mitigation that is appropriate to enhance the wetland values in the immediate area. For example, the applicant could be required to enhance waterfowl use of the area through development of waterfowl staging ponds on the CBJ-owned property (MW4) to enhance the regional ecological diversity of the area. The CBJ staff and Wetland Review Board shall be consulted to determine the appropriate mitigation strategy for any proposed project.

LIMITS OF THIS AUTHORIZATION:

1. These GPs or authorizations obtained under these GPs do not obviate the need to obtain other Federal, State, or local authorizations required by law, nor does it apply to activities denied by any State, Federal agency, or the CBJ.

2. These GPs do not convey property rights, either in real estate or material, or exclusive privileges; do not authorize injury to property, or invasion of rights or any infringement of Federal, State, or local laws or regulations; nor do these GPs nor any authorization obviate the requirement to obtain State or local assent required by law for the activity authorized herein.

3. These GPs or authorizations obtained under these GPs do not authorize interference with any existing or proposed Federal project.

4. In issuing these GPs or authorizations obtained under these GPs, the Federal Government does not assume any liability for the following:

a. Damages to an authorized project or uses thereof as a result of the permitted or non-permitted activities or from natural causes;

b. Damages to an authorized project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest;

c. Damages to persons, property, or to other permitted or non-permitted activities or structures caused by the activity authorized by this GP;

d. Design or construction deficiencies associated with the authorized work;

e. Damage claims associated with any future modification, suspension, or revocation of one or more of these GPs, or authorizations obtained under these GPs

5. This office may reevaluate its decision on the GPs or any determinations made under these GPs by either this office or the CBJ at any time the circumstances warrant. Circumstances that would require a reevaluation include, but are not limited to, the following:

a. The permittee or the CBJ fails to comply with the terms and conditions of a specific GP

b. The information provided by the permittee in support of an application for authorization under these GPs proves to have been false, incomplete, or inaccurate;

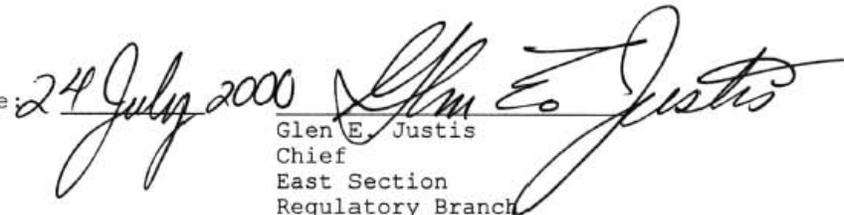
c. Significant new information surfaces which this office did not consider in reaching the original public interest decision; or

d. The CBJ itself is found to be party to violations of the Clean Water Act. If the District Engineer determines that this has occurred, the District Engineer may require verification of all projects by the Regulatory Branch of the Alaska District, Corps of Engineers, until such time as the issue is resolved to the District Engineer's satisfaction.

Such a re-evaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring the permittee to comply with the terms and conditions of these GPs and for the initiation of legal action where appropriate.

The permittee shall be required to pay for any corrective measures ordered by this office, and if the permittee fails to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise, and bill the permittee for the cost.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Date: 24 July 2000 
Glen E. Justis
Chief
East Section
Regulatory Branch
Alaska District Corps of
Engineers

Attachments

ATTACHMENT to GENERAL PERMITS 2000-01, 2000-02, 2000-03 and 2000-04

Note: These GPs are based on mapping by the Alaska District, Corps of Engineers, Regulatory Branch, as shown in the Juneau Wetlands, Functions and Values, Map Appendix, September 1987; many small wetlands not shown are protected by law, but are not included in these GPs.

Note: Shoreline Corridor Rule. Riverine and lacustrine shoreline corridors take priority over all other management categories and designations. All catalogued anadromous fish streams shall have a 100-foot shoreline corridor on each side of the stream, measured from the ordinary high water mark in the main channel up to the point shown in "An Atlas to the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes" indicating the presence of anadromous fish. The 100-foot shoreline corridor shall be designated and managed as Wetland Category A. There shall be a 100-foot shoreline corridor around lakes, measured from the ordinary high water mark of the shoreline; the lacustrine shoreline corridor shall only apply to bodies of water more than 20 acres in area with water depths in the deepest part of the basin exceeding 6.6 feet at low water. If the lacustrine wetland or adjacent palustrine wetland is Category A, then the 100-foot lakeshore corridor shall be Category A. In all other cases the lakeshore corridor shall be Category B. This rule applies only to wetlands; no uplands shall be included within the 100 foot A (or B) wetland corridors. The Shoreline Corridor Rule shall take precedence over the Residential Road Corridor Designation Rule, described below.

Note: The Residential Road Corridor Designation Rule is described on page 30 of the JWMP, February 1991, with further amendments by the Coastal Policy Council on October 31, 1991: The definition of "residential road corridor" is also discussed on page 5 of the revised JWMP, February 1997. It applies only to residential development on parcels where public water is already provided, the parcel is already affected by development and is subdivided into small lots. This rule allows residential development to be reviewed under Category C guidelines in cases where: (1) the residential parcel is in a development corridor served by public water and existing local access roads; (2) the property owner has no practicable upland alternative to wetland development; and (3) the proposal shall consist of only residential building pads and direct access to them. The Residential Road Corridor Rule is quoted in part here: "Undeveloped palustrine wetland residential parcels with no practicable upland development alternatives shall have a temporary 100-foot Category C designation corridor measured from the road frontage right-of-way,.... Developed palustrine residential parcels shall have a Category C designated envelope that is 30 percent larger than their existing fill footprint.... Undeveloped residential parcels with an upland practicable development alternative on the parcel shall retain their original designated management category."

M7, M9, M10, and M13: If development is proposed in wetland units M7, M9, M10, or M13, the applicant would be required to conduct mitigation to support and enhance the functioning of Jordan Creek in the area owned by the CBJ in Wetland Unit M7. The "Juneau Creeks Greenbelt Study", prepared by the CBJ with the assistance of the Alaska Department of Fish and Game in January 1984, lists possible mitigation projects for this section of Jordan Creek. These projects could be pursued as mitigation; however, the appropriate Federal, State and local Borough/City resource agencies will be consulted during the site plan review process to determine if this is the most appropriate mitigation for the proposed project.

M9: Development of wetland Unit M9 will involve a site plan review process that will consider: (1) restricting fill to the minimum amount necessary to achieve stated project purposes; (2) consolidating development; and (3) if development of the wetland is to occur in phases, developing to the extent practicable the lower value areas first. Measures shall be taken to avoid impacts to the portion of the wetland that is not developed. This would include maintaining the hydrologic connection to the undisturbed portion of the wetland through wetland Unit M10. CBJ staff will consult with the appropriate Federal, State and local Borough/City resource agencies on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

M49, M51, and M53: These wetland units are re-classified as Category A wetlands. An individual Department of the Army permit will be required prior to the discharge of material into these wetlands, which were previously categorized as 'C' wetlands in GP 92-01 and in the JWMP.

WEST VALLEY

MW5: Fill will be restricted to the minimum amount necessary to achieve project purposes and measures shall be taken to avoid impacts to portions of the wetland that will not be developed. CBJ staff will consult with the appropriate Federal, State and local Borough/City resource agencies on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board. Applicants will be required to conduct mitigation that is appropriate to enhance the wetland values in the immediate area. For example: the applicant could be required to enhance waterfowl use of the area through development of waterfowl staging ponds on the CBJ-owned property (MW4) to enhance the regional ecological diversity of the area. The appropriate Federal, State and local Borough/City resource agencies will be consulted to determine if this is the most appropriate mitigation strategy for the proposed project.

Road Corridor in MW11 along Engineer's Cutoff Road applies only to lots that are already developed; Road Corridor would allow 30% expansion of the existing fill sites subject to restrictions associated with road corridors and stream corridors.

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF AIR AND WATER QUALITY
NON-POINT SOURCE WATER POLLUTION CONTROL

TONY KNOWLES, GOVERNOR
555 Coadeva Street
Anchorage, AK 99501-2617
Phone: (907) 269-7564
Fax: (907) 269-7508
TTY: (907) 269-7511
<http://www.state.ak.us/dec/>

July 18, 2000
Receipt for Certified Mail Z 526 022 669

John Leeds III
US Army Corps of Engineers
Reg. Branch, Juneau Office
8800 Glacier Highway
Juneau, AK 99801

Subject: General Permits 2000-01, -02, -03, and -04
City and Borough of Juneau
State I.D. No. AK 0005-05J

Dear Mr. Leeds:

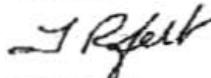
In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation is issuing the enclosed Certificate of Reasonable Assurance for the proposed general permits for wetland activities within the City and Borough of Juneau, Alaska.

This certification is one of the approvals required as part of a coastal management consistency determination issued by the Division of Governmental Coordination under AAC 50.070.

Department of Environmental Conservation regulations provide that any person who disagrees with any portion of this action may request an adjudicatory hearing in accordance with 18 AAC 15.200-920. This request should be mailed to the Commissioner of the Alaska Department of Environmental Conservation, 410 Willoughby Avenue, Suite 105, Juneau, Alaska 99801-1795. Please also send a copy of the request for hearing to the undersigned. Failure to submit a hearing request within thirty days of receipt of this letter constitutes a waiver of that person's right to judicial review of this action.

By copy of this letter we are advising the Division of Governmental Coordination of our actions and enclosing a copy of the certification for their use.

Sincerely,



Tim Ruppelt
Environmental Specialist

Enclosure

CC: (with encl.)
ACMP, DNR/DOL
DGC, Juneau

EPA, AK Operations
F&WS

"Clean Air, Clean Water"

**STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE**

A Certificate of Reasonable Assurance, in accordance with Section 401 of the federal Clean Water Act and the Alaska Water Quality Standards, is issued to the US Army Corps of Engineers Alaska District, Regulatory Functions Branch, Juneau Field Office, 8800 Glacier Highway, Juneau, Alaska 99801, for the proposed following general permits (GPs), covering wetland activities with the City and Borough of Juneau.

GP 2000-01 is for residential fill pads, site preparation, and driveways; GP 2000-02 is for commercial, community, and institutional development; GP 2000-03 is for wetland functional enhancement; and GP 2000-04 is for roads and other linear development. The GPs authorize the discharge of fill material into wetlands within the City and Borough of Juneau, which have been designated "C", "D", "EP", or as Road Corridors, in the Juneau Wetlands Management Plan. The objective of the GPs is to allow planned, systematic development of private and commercial lots and selected government managed areas and expedite the permitting process in the aforementioned wetlands, while maintaining important wetland functions.

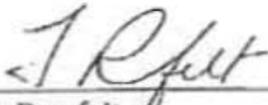
The proposed activity is located within the City and Borough of Juneau, Alaska

Public notice of the application for this certification was given as required by 18 AAC 15.180.

Water Quality Certification is required under Section 401 because the proposed activities will be authorized by a Corps of Engineers permits and a discharge may result.

Having reviewed the application and comments received in response to the public notice, the Alaska Department of Environmental Conservation certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the Clean Water Act, the Alaska Water Quality Standards, 18 AAC 70, and the Standards of the Alaska Coastal Management Program, 6 AAC 80.

Date 7/18/00



Tim Rumpfelt
Environmental Specialist

STATE OF ALASKA

OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET
DIVISION OF GOVERNMENTAL COORDINATION

TONY KNOWLES, GOVERNOR

SOUTHCENTRAL REGIONAL OFFICE
550 W. 7TH AVENUE, SUITE 1660
ANCHORAGE, ALASKA 99501
PH: (907) 269-3980/FAX: (907) 269-3981

CENTRAL OFFICE
P.O. BOX 110030
JUNEAU, ALASKA 99811-0030
PH: (907) 465-3562/FAX: (907) 465-3075

PIPELINE COORDINATOR'S OFFICE
411 WEST 4TH AVENUE, SUITE 20
ANCHORAGE, ALASKA 99501-2343
PH: (907) 271-4317/FAX: (907) 272-0680

June 28, 2000

Mr. John Leeds
U.S. Army Corps of Engineers
Juneau Field Office
8800 Glacier Highway
Juneau, AK 99801

RECEIVED

JUN 29 2000

CENPA - CO - R - E - JFO
Alaska District Corps of Engineers

Dear Mr. Leeds:

SUBJECT: JUNEAU WETLANDS GP RENEWAL (Replace 92-1 with 2000-01 through -04)
STATE I.D. NO. AK0005-05J
FINAL CONSISTENCY DETERMINATION

The Division of Governmental Coordination (DGC) has completed coordinating the State's review, per the Federal Coastal Zone Management Act as per 15 CFR 30 Subpart C, of the proposed general permits for the City and Borough of Juneau for consistency with the Alaska Coastal Management Program (ACMP). I issued a proposed finding on 6/21.

Scope of Project Reviewed

The activity subject to this review is the Corps of Engineers' proposal to replace the existing General Permit (GP) 92-1, issued to the City and Borough of Juneau, with four GPs 2000-01, 2000-02, 2000-03, and 2000-04, for the mechanized landclearing and for the discharge of fill material into waters, including wetlands, of the United States within the City and Borough of Juneau. GP 92-1, which is scheduled to expire on 6/30/00, was reviewed for consistency; the previously approved GP was proposed for five years; thus, the scope of the previous consistency review covered five years. It authorized the discharge of fill material into wetlands within the City and Borough of Juneau which have been designated C, D, EP, or as Road Corridors, in the Juneau Wetlands Management Plan (JWMP), dated 2/91, adopted in revised form by the Coastal Policy Council on 10/31/91, and as approved for incorporation into the federally approved ACMP. Specifically, the new GPs will cover:

- GP 2000-01 -- residential fill pads, site preparation and driveways
- GP 2000-02 -- commercial, community and institutional development
- GP 2000-03 -- wetland functional enhancement
- GP 2000-04 -- roads and other linear development

These GPs would authorize the discharge activities previously covered in GP 92-1. GPs are considered appropriate for activities which are substantially similar in nature, which cause only minimal adverse environmental impact when performed separately, which would have only minor cumulative effect on water quality and which would provide a more effective administration of the Clean Water Act without creating an undue burden on the public. These GPs would continue to authorize the discharge activities previously covered in GP 92-1, if after consultation with federal and state regulatory and resource agencies, and public input, the COE district engineer determines that the proposed classes of activities would be minor, and would not have more than a minimal individual or cumulative impact on the human environment. The four new GPs, based on the revised Juneau Wetlands Management Plan (JWMP) dated February 1997, are proposed to be in effect five years. The public notice states: "At the end of the 5-year period, an evaluation of the program will be made and at that time it will be decided whether one or more of these permits should be renewed."

The activities covered by the GPs are described in detail within the COE public notice and GPs. The GPs contain 24 general conditions and five special conditions pertaining to specific wetland unit designations in the JWMP. The conditions are a part of the project description and scope of project being reviewed.

The division into four different permits is mainly administrative in nature. The scope of the project includes a change described in the attachment to GP 2000-01, 2000-02, 2000-03 and 2000-04 Shoreline Corridor Rule. The attachment provides that riverine and lacustrine shoreline corridors take priority over all other management categories and designations. All catalogued anadromous fish streams shall have a 100-foot shoreline corridor on each side of the stream, which shall be designated and managed as wetland category A. As such, M49, M51 and M53 will be reclassified as category A wetlands. This change allows for greater protection of coastal resources than previously afforded.

Background. On 6/30/95, the COE issued GP 92-1. The GP was reviewed for consistency with the ACMP under file AK920803-01J. GP 92-1 authorized the discharge of fill material into wetlands within the City and Borough of Juneau, which have been designated C, D, EP, or as Road Corridors in the JWMP, dated February 1991, adopted in revised form on 10/31/91. The JWMP was revised in February 1997, and incorporated all of the changes required by the GP and updated maps. During the five-year period for GP 92-1, there have been eight projects approved under GP 92-1, authorizing the placement of up to approximately 56,000 cubic yards of material into approximately 11 acres of wetlands. A history of ACMP reviews shows: (1) AK920803-01J, the GP 92-1 currently expiring; (2) AK920401-01J, a former version of the GP which was revised by the application submitted by the COE on 8/3/92 and subsequently reviewed under AK920803-01J. Also, as a historic note, AK9407-19J was a review of an "Accelerated Individual Permit Process Procedure, Special Public Notice 94-6 dated 3/24/94, where a COE

permit would have been required but an abbreviated public notice and review process would occur. This proposal was withdrawn prior to conclusion of the 1994 review.

State consistency response

This consistency determination applies to the following federal authorization per 6 AAC 50:

U.S. Army Corps of Engineers

Section 404 General Permit Nos. 2000-01, 2000-02, 2000-03, 2000-04

Alaska Department of Environmental Conservation (DEC)

Certificate of Reasonable Assurance (401)

No State agency may issue an authorization before DGC issues a final consistency finding. But, a consistency finding does not obligate any agency to issue authorization under its own statutory authorities, nor does it supersede its statutory obligations. Authorities outside the ACMP may result in additional permit/lease conditions not contained in the consistency determination.

The Alaska Departments of Environmental Conservation, Fish and Game, and Natural Resources, and the Juneau Coastal District, have reviewed the proposed general permits. Based on that review, the State agrees with the federal agency consistency determination that the project is consistent with the ACMP.

This final consistency determination is a final administrative decision for purposes of Alaska Appellate Rules 601-612. Any appeal from this decision to the superior court must be made within 30 days of the date of this determination.

Advisories.

The CBJ commented that GP 92-1 was found consistent with the JCMP, and the proposed GPs accomplish the same objectives as GP 92-1.

The CBJ also stated in its comments: Any stipulations previously applied to the General Permit 92-1 should still apply. In the most recent record of review for GP 92-1, AK920803-01J, the State issued a final consistency determination finding it consistent as proposed, with no additional stipulations. We note that the proposed GP contained several conditions, which comprise the project description and scope of project reviewed by the State.

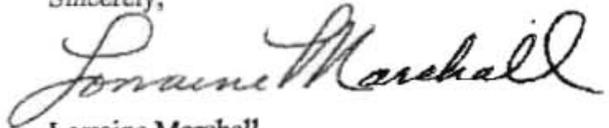
The consistency determination may include reference to specific laws and regulations, but this in no way precludes your responsibility to comply with all other applicable State and federal laws and regulations.

Changes. This consistency determination is ONLY for the project (general permits) as described. If any changes to the GPs are proposed, including their intended use, you must contact this office immediately to determine if further review and approval of the revised project is necessary. Changes may require amendments to the State approval listed in this consistency determination or require additional authorizations.

If any activities reveal cultural or palaeontological resources, work that would disturb such resources should be stopped and the State Historic Preservation Office should be immediately contacted (907-269-8720), as well as the U.S. Army Corps of Engineers (907-753-2712) so that consultation per section 106 of the National Historic Preservation Act may proceed.

If you have any questions, please contact me at 907-465-8790 or email lorraine_marshall@gov.state.ak.us.

Sincerely,



Lorraine Marshall
Project Review Coordinator

cc: Jim Powell, DEC
Ben Kirkpatrick, DFG
Bill Hanson, DFG
Terry Rader, DNR
Doug Sanvik, DNR *
Michele Jespersen, DNR SHPO
Sylvia Kreel, Juneau Coastal District
Duane Petersen, FWS
Linda Shaw, NMFS
Mark Jen, EPA



US Army Corps
of Engineers
Alaska District

Public Notice

SPN-2005-11, Dated May 24, 2006

Regulatory Branch (1145b)
Juneau Field Office
Suite 106
8800 Glacier Highway
Juneau, Alaska 99801

**IDENTIFICATION Nos.: GP 2000-01, GP 2000-02,
GP 2000-03, and GP 2000-04**

In reply refer to above Identification Number(s)

GENERAL PERMITS

GP-2000-01, GP-2000-02, GP-2000-03, GP-2000-04
General Permits for the City and Borough of Juneau, Alaska

The District Engineer, Alaska District, U.S. Army Corps of Engineers has issued three General Permits (GP) Renewals for GPs 2000-01, 2000-02, and 2000-03, under the authority of Section 404 of the Clean Water Act (Public Law 95-217, 33 U.S.C. 1344 et. seq.), for the mechanized land clearing, and for the discharge of fill material into waters of the United States (U.S.), including wetlands, within the City and Borough of Juneau (CBJ), Alaska.

In response to Special Public Notice SPN-11, dated July, 18, 2005, the three proposed GPs, 2000-01, 2000-02, and 2000-03 were revised to reflect comments submitted by local, State, and Federal agencies, and the interested public. GP 2000-04, was not reauthorized due to lack of use, and was allowed to expire and will not be renewed. Based on a review of all pertinent information, including a prepared Environmental Assessment and Combined Decision Document, I have concluded that issuance of these permits will not have more than minimal adverse impact on the environment and is not contrary to the public interest.

Several changes to the reauthorized GPs have been made. See CHANGES FROM GP 2000-01, 2000-02 and 2000-03, in the attached GP document.

These GPs will authorize the discharge of fill material into waters of the U.S., including wetlands, for the purpose of creating foundation pads for structures, utilities, associated roads, driveways, parking areas, and other domestic, governmental, and commercial development, as well as enhancement of certain environmental situations. These GPs authorize mechanized land clearing and other activities that could result in a re-deposition of fill material.

The wetland units covered by these GPs, as described in the original GP 92-01, dated June 30, 1995, have been mapped on the CBJ Street Atlas. Maps showing the areas subject to authorization under these GPs, and areas specifically excluded from the GPs, are available for public use at the CBJ Department of Community Development, 155 South Seward Street, Juneau, Alaska, 99801-1397, telephone (907) 586-5235; and at the Alaska District, Corps of Engineers, Regulatory Branch, Juneau Field Office. Please note that these GPs will result in slight changes to those maps. The areas excluded from the GPs' coverage will be subject to an individual permit review. All authorized activities must be in accordance with

the conditions of the GPs, a copy of which is attached. Failure to comply with the terms and conditions of these permits could result in suspension, modification, or revocation of the permit, and/or imposition of penalties as provided by law.

GPs 2000-01, 2000-02, and 2000-03 will be valid for a period of five years, effective the date of this public notice. The District Engineer may at any time during this five-year period, alter, modify, suspend, or revoke this permit if he deems such action to be in the public interest.

Any comments or request for additional information should be directed to: Mr. Garth Zimbelman, Regulatory Specialist, Juneau Regulatory Field Office, U.S. Army Corps of Engineers, 8800 Glacier Highway, Suite 106, Juneau, Alaska 99801-8079, or contact Mr. Zimbelman at (907) 790-4490, by FAX at (907) 790-4499 or by email at Garth.A.Zimbelman@poa02.usace.army.mil.

District Engineer
U.S. Army, Corps of Engineers

Attachments

GENERAL PERMITS 2000-01, 2000-02, 2000-03

General Permits (GP) 2000-01, 2000-02, and 2000-03, dated July 24, 2000, and previously issued cumulatively as GP 92-1 on June 30, 1995, have been reauthorized for a period of 5 years by the Alaska District, Corps of Engineers (Corps), in accordance with Title 33 CFR 325.2 (e) (2), as published in the Federal Register, Volume 51, Number 19, pursuant to Section 404 of the Clean Water Act (PL 95-217, 33 U.S.C. 1344), and authorize the mechanical land clearing of wetlands, and the placement of fill and/or dredged fill material into wetlands within the City and Borough of Juneau (CBJ) which have been designated 'C', 'D', 'EP', or as 'Road Corridors' in the Juneau Wetlands Management Plan (JWMP), dated February 1991, and adopted in revised form by the Coastal Policy Council on October 31, 1991, and as approved for incorporation into the Federally approved Alaska Coastal Management Plan (ACMP) pursuant to 15 C.F.R. 923.84, effective November 23, 1993 (see Attachment 1 for the list of approved management categories). GP 2000-04, dated July 24, 2000, was not reauthorized and has been allowed to expire. All previous changes and revisions have been incorporated into the revised JWMP, dated February 1997. New changes to the GPs and the JWMP are described below.

ACTIVITY: These GPs authorize the placement of fill into certain designated wetlands located within the CBJ.

GP 2000-01, POA-2005-756 is for residential fill pads, site preparation, and driveways. Residential development is defined as the construction of single, attached and multi-family dwellings, a subdivision; a place used exclusively for human habitation; a person's fixed, permanent, and principal home for legal purposes. Residential development also includes work performed in association with the installation of driveways and of a dwelling's septic/sewer system. See CBJ Land Use Code, Title 49.

GP 2000-02, POA-2005-757 is for commercial, community and institutional development. Commercial development is defined as the construction of private facilities for the exchange or buying and selling of commodities. Commercial development structures include movie theaters, pool halls/arcades, video tape rentals, bingo halls, hotels/restaurants, hair salons, tanning salons, fabric/dress shops, daycare/baby-sitting facilities, lumber and hardware stores, etc. Public and institutional development is defined as the construction of facilities relating to business or community interests as opposed to private interests. Public development includes city halls, church buildings, post offices, fire stations, and similar projects. See CBJ Land Use Code, Title 49.

GP 2000-03, POA-2005-758 is for wetland functional enhancement projects. See CBJ Land Use Code, Title 49.

GP 2000-04, POA-2005-759 was for roads and other linear developments. This GP is not being re-authorized and has been allowed to expire.

In addition to the restrictions described in the revised JWMP adopted by the Coastal Policy Council on October 31, 1991, and as approved for incorporation into the Federally approved ACMP pursuant to 15 C.F.R. 923.84, effective November 23, 1993, no authorization for fill is granted by these GPs for the following activities: heavy industry, dry cleaning operations, battery transfer yards, commercial auto repair garages, fuel storage sites, hazardous waste management facilities, service stations, landfills, petro-chemical plants, or other projects involving the manufacture, storage, or disposal of waste/toxic substances. All activities built under these GPs shall conform to the CBJ Land Use Code. The impacts of fill pads for other uses are similar regardless of surface use; further review and decisions concerning surface uses in the areas covered by these GPs are appropriate to State and local government. These GPs do not apply to estuaries or anadromous riverine wetlands, protective greenbelts, or any other wetland or corridor not designated C, D, or EP, or as a Road Corridor. Mitigation activities, involving either land

clearing and/or the discharge of dredged or fill material into waters of the United States (U.S.), including wetlands, not administered by these GPs, will require a separate Department of the Army authorization. These GPs are based on the JWMP, dated February 1991, with the inclusion of revisions approved by the Coastal Policy Council on October 31, 1991, the revised list of wetland unit classifications with special conditions in the attachment to these GPs, the maps in the Juneau Wetlands, Functions and Values, Map Appendix, dated September 1987, the revised list of wetland unit classifications with special conditions and maps provided in the February 1997 revision of the JWMP, and will include the changes described below. These GPs will not be altered by any change in the CBJ's Plan unless the District Engineer determines that an alteration is not contrary to the public interest following a public interest review of the proposed change or alteration, and the GP is subsequently modified to incorporate these revisions.

CHANGES MADE TO GPs 2000-01, 2000-02, 2000-03:

1. General Condition #9, as stated in SPN-2005-11, has been changed by the addition of the following language, *"The CBJ shall fax the permit applications to the State Historic Preservation Office (SHPO). Upon receipt of the fax, the SHPO will have 15 days to review the project for conflicts with the cultural resources under Section 106 of the National Historic Preservation Act. If necessary, the SHPO may request additional review time provided that they contact the CBJ within 15 days"*.
2. Special Condition #4, as stated in SPN-2005-11, has been removed from the GP Special Conditions, as it is no longer relevant to the renewed GPs.

PROCEDURE: All applicants desiring to mechanically clear, or discharge dredged and/or fill material into U.S. waters under the terms of these GPs will submit an application to the CBJ Department of Community Development. The application will require descriptions of the location, proposed activity, purpose and need. The description will include quantities of fill, acreage of disturbed surface area, steps that the applicant proposes to take to comply with the mitigation policies of the JWMP, source of fill, and offsite disposal locations, supported by applicable drawings and narrative.

The CBJ will determine if the proposed mechanical land clearing, or discharge of dredged and fill material meets local permit requirements and is consistent with the criteria of the GP. In all cases the CBJ will proceed with its review as soon as it receives an application. The CBJ's determination of consistency is advisory, is not legally binding as to authorization under a particular GP, and does not constitute issuance of or authorization under the GPs.

For projects that would involve mechanically clearing, or filling between five and ten acres of wetlands, the CBJ will provide the Corps with a copy of the application; the Corps shall determine which GP applies and whether any additional special conditions shall be added to protect the Federal interest. The Corps shall have 15 days in which to make this determination. In reviewing an activity under the notification procedure, the District Engineer will determine whether the activity will result in more than minimal individual or cumulative adverse environmental effects or will be contrary to the public interest. The Corps shall notify the CBJ of its determination.

For projects that would involve mechanically clearing, or filling more than ten acres of wetlands, the CBJ will provide the application to the Corps, who shall determine within 30 days of receipt of a complete application whether one or more of the GPs apply, or if the proposed project requires an individual Department of the Army permit. The Corps shall notify the CBJ of its determination. If the proposed action meets the GPs' qualifications, the application would be returned to the CBJ.

For projects that would involve mechanically clearing, or filling five or less acres of wetlands, the CBJ will determine whether the proposed activity is located in areas designated as Road Corridors, or classified as a C, D, or EP wetland and meets the criteria of one or more of the GPs. Upon issuance of the necessary CBJ Wetland

Permit and other CBJ Title 49 Planning and Zoning permits, no further Corps action is required to proceed under one or more of these GPs. As is currently the case, the CBJ will require that all necessary municipal authorizations be obtained before the requested mechanical land clearing, or discharge of dredged and fill material can proceed. Relative to the GPs, the Corps retains its full legal authority and may suspend use of or find a violation of the GPs at any time it determines that an activity is not in compliance with the GPs, even if the CBJ has advised an applicant the activity meets the criteria of the GP's.

Authorization to proceed will require fulfillment of the general conditions specified here and of the special conditions applicable to particular sites as noted in the attachment to this notice, as well as fulfillment of any additional special conditions included in the CBJ Wetland Permit as determined by the CBJ Wetlands Review Board. At the time of the issuance of the local authorization, the CBJ will give a copy of the conditions for these GPs to the individual.

The CBJ authorization of the CBJ Wetland Permit would expire in eighteen months, if no other required CBJ permits have been issued, or no substantial construction progress has been made pursuant to these local permits, unless otherwise specified in the CBJ Wetland Permit. For any partially completed work, the permittee shall restore the site to pre-project conditions, or apply for an extension or reauthorization under the GP from the CBJ.

INDIVIDUAL AUTHORIZATIONS: Any project that has any local authorization denied will be closed and an application for an individual Department of the Army permit will not be accepted by the Corps. The Corps retains the final review and authority to determine compliance of a given activity with the GP. The CBJ is expected to confer with the Corps in questionable or borderline proposals before the requisite local authorization to proceed under the GP is issued.

REPORTING: The CBJ shall compile information on authorizations issued under this GP and provide the Corps with copies of all applications and authorizations made under each GP for each quarter. Reports shall be submitted to the District Engineer by the following dates: April 10 (for January 1- March 31), July 10 (for April 1-June 30), October 10 (for July 1- September 30), and January 10 (for October 1- December 31).

The CBJ will submit to the District Engineer once a year the following information: total acreage permitted for mechanical land clearing, or discharge of dredged and fill material, number of permits granted for each GP, average permit processing time, and enforcement activities. In addition, if the CBJ adopts and implements a mitigation banking plan, a copy of the appropriate wetland mitigation bank annual report will be submitted to the District Engineer.

IMPLEMENTATION: Implementation will be in accordance with the JWMP of February 1991, as amended by the Coastal Policy Council on October 31, 1991, and the site-specific changes described in this document, and in the revised JWMP, dated February 1997, and the CBJ implementing ordinance.

DURATION: These GPs are in effect for a period of 5 years. At the end of the 5-year period, an evaluation of the program will be made and at that time it will be decided whether one or more of these permits should be renewed.

MAPS AND JURISDICTIONAL BOUNDARIES: These GPs are based on the revised JWMP, dated February 1997, with the inclusion of revisions approved by the Coastal Policy Council on October 31, 1991, the revised list of wetland site classifications with special conditions attached to the original GP, and the maps in the Juneau Wetlands, Functions and Values, Map Appendix, dated September 1987. The procedure for situations where the wetland designation or classification is in question and needs a more definitive jurisdictional determination consists of requesting field verification from the District Engineer. The wetland units covered by these GPs have been mapped on the CBJ Street Atlas. This Atlas is available for review from

the CBJ Department of Community Development, 155 South Seward Street, Juneau, Alaska, 99801-1397; telephone (907) 586-5235. Please note the changes to the JWMP, resulting from the changes in the Shoreline Corridor Rule.

VERIFICATION: These GPs do not require notification to the District Engineer prior to commencement of the authorized activity, nor do they require confirmation from the District Engineer that a proposed activity is in full compliance with all terms and conditions of this GP as authorized.

Nevertheless, a General Permittee may choose to request in writing, verification that his proposed activity is authorized by a specific GP, by writing to the Alaska District, Corps of Engineers, Regulatory Branch, Juneau Field Office, 8800 Glacier Highway, Suite 106, Juneau, Alaska 99801-8079. Any written inquiry must include the following information:

1. Name, address and telephone number of the applicant;
2. Location of the proposed work;
3. Brief description of the proposed work listed in the earlier Procedures Section of the specific GP;
4. Identification of the GP or permits which apply to the proposed work; and
5. Any other information that the applicant believes is appropriate.

If the General Permittee's written request for verification is complete, accurate and made in good faith, and the Corps does not respond to such inquiry within 20 days after the Corps receives such inquiry, the General Permittee may proceed with the activity, provided all necessary CBJ permits are obtained. The General Permittee's authorization can only be suspended, modified or revoked in accordance with the procedure set forth in 33 CFR 325.7. If the Corps later determines that the General Permittee's written request for verification was inaccurate, incomplete or made in bad faith, and that the activity was not in fact authorized by the GP, the Federal Government may bring an appropriate enforcement action under 33 CFR Part 326.

GENERAL CONDITIONS: All authorizations issued under these GPs are subject to the following conditions:

1. The amount of fill authorized by these GPs shall not exceed the amount authorized by the CBJ in its wetland permit.

2. Activities authorized under these GPs shall not adversely impact adjacent estuarine, riverine, or A & B wetlands by causing ponding, drainage, siltation or inadvertent fill. The use of culverts or other methods may be required to ensure compliance with this condition. Shoreline corridors shall be designated measuring 100 feet landward (inclusive) of the ordinary high water mark of anadromous fish streams and lakes. This corridor will be classified as Category A Wetlands (see Shoreline Corridor Rule).

3. All fill material authorized under these GPs shall be free from toxic pollutants in toxic amounts, as defined by Alaska State law.

4. Upon completion of earthwork operations, all exposed slopes, fills and disturbed areas shall be properly stabilized, by appropriate means such as landscaping, or planting and maintaining vegetative cover to prevent subsequent erosion. All disturbed soil areas (exposed soils) shall be revegetated within the next growing season. Natural revegetation is acceptable if the site will be revegetating itself within the next growing season. If natural revegetation is not successful, additional measures shall be taken to ensure compliance with this condition, such as interim protective cover until natural regrowth occurs.

5. No borrow material may be obtained within 330 feet of an eagle nest. This does not absolve the applicant from responsibilities to protect bald eagles under provisions of the Bald Eagle Protection Act.

6. No borrow material may be obtained from an estuarine, riverine, A or B wetlands for activities covered under these GPs.

7. These GPs do not apply for activities currently covered by a Nationwide Permit. No additional authorization is required for Nationwide-Permitted activities.

8. The permittee must maintain the structure or work authorized by these GPs in good condition and in conformance with the terms and conditions of the specific GP. The permittee is not relieved of this requirement if the permittee abandons the permitted activity, although the permittee may make a good faith transfer to a third party. Should the permittee wish to cease to maintain the authorized activity or should the permittee desire to abandon it without a good faith transfer, the permittee must obtain a modification of this permit from this office, which may require restoration of the area.

9. All activities conducted under these GPs (including the use of new borrow sites) shall not take place in or adversely affect any existing historical properties listed or eligible for listing in the National Register of Historic Places or any historical properties found to be listed or eligible for listing on the National Register of Historic Places subsequent to the issuance of these GPs. The CBJ shall fax the permit applications to the State Historic Preservation Office (SHPO). Upon receipt of the fax, the SHPO will have 15 days to review the project for conflicts with the cultural resources under Section 106 of the National Historic Preservation Act. If necessary, the SHPO may request additional review time provided that they contact the CBJ within 15 days. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, the permittee must immediately notify the Corps regarding the find. The Corps will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

10. The permittee must comply with any conditions specified as part of the State water quality certification, which is part of these GPs.

11. Methods shall be implemented to filter or settle out suspended sediments from all construction-related wastewater prior to its direct or indirect discharge into any natural body of water.

12. Design plans for any stormwater collection system to be placed into or associated with the authorized fill must be approved by the Alaska Department of Environmental Conservation prior to system construction or fill placement.

13. Measures shall be implemented to attenuate flows, remove oil, grease, and other petroleum products from the project's stormwater collection system, if one is required by the Alaska Department of Environmental Conservation.

14. Design plans for any on-site sewage disposal system associated with the proposed fill must be approved by the Alaska Department of Environmental Conservation prior to construction.

15. The permittee must allow the District Engineer, or his designated representatives, to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of these GPs.

16. These GPs shall not apply to any activity or use that would involve the storage or use of hazardous materials or substances as part of their principal purpose. These materials are defined in the Resource Conservation and Recovery Act and the Comprehensive Environmental Response and Liability Act.

17. All activities authorized under these GPs must meet a clearly demonstrated need. The CBJ review and building permit shall be instrumental in this respect to help prevent speculative projects and/or those contrary to the general public interest.

18. The applicant must design his proposed project so as to minimize the area of wetlands needed to be filled.

19. Equipment Operation and Marking of Footprint: Prior to initiation of construction, the permitted project footprint and any applicable waterbody setbacks, wetland buffers, and/or other avoidance areas shall be clearly delineated, using stakes, flags, fencing, or other similar measures. No equipment used for activities permitted under these GPs shall be operated, stored, or serviced in wetlands, and no mechanized land clearing or discharge of fill material may occur, even temporarily, in wetlands or other waters beyond the project footprint or within avoidance areas.

20. All activities identified and authorized herein shall be consistent with the terms and conditions of the appropriate GP, and activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of that GP which result in the modification, suspension or revocation of any authorization in whole or in part, and in the institution of such legal proceedings as the United States Government may consider appropriate.

21. All activities authorized herein shall be conducted in a manner that is consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards, and management practices established pursuant to the Clean Water Act (PL 95-217 33 U.S.C. 1344), the Marine Protection, Research and Sanctuaries Act of 1972 (PL 92-532: 86 Stat. 1052) and pursuant to applicable State and local law.

22. The activity shall not jeopardize the continued existence of a threatened or endangered species, as identified under the Endangered Species Act, or endanger the critical habitat of such species.

23. The permittee shall implement the construction or operation of the work authorized herein in a manner so as to minimize adverse impact on fish, wildlife and natural environmental values. The project shall include all measures imposed by the CBJ Wetland Review Board to mitigate the adverse impacts of the work consistent with the enforceable policies of Chapter 3 of the JWMP, dated February 1991, as revised by the Coastal Policy Council on October 31, 1991.

24. These GPs shall not apply to mitigation activities involving either land clearing and/or the discharge of fill into estuaries or anadromous riverine wetlands, protective greenbelts, or any other wetland or corridor not designated C, D, or EP, or as a Road Corridor. For these situations, a Department of the Army permit application must be submitted to the Corps.

SPECIAL CONDITIONS: (pertaining to specific wetland unit designations in the JWMP).

1. UMI: Portions of the Category C area shall be retained undisturbed through a site plan review process that shall consider: (a) siting residences to the extent practicable to maximize use of the non-wetland areas or lower value wetland areas that occur within the unit; (b) restricting fill associated with the residences, driveways and roads to the minimum amount necessary to achieve project purposes; (c) use of site plan techniques to consolidate development. The area shall be retained in a low-density residential zoning (D1, D3, or D5). Construction mitigation techniques shall be used to avoid impacts to portions of the wetlands that shall not be developed. The CBJ staff shall consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

2. M7, M9, M10, and M13: If development is proposed in Wetland Units M7, M9, M10 or M13, the applicant shall be required to conduct mitigation to support and enhance the functioning of Jordan Creek in the area owned by the CBJ in Wetland Unit M7. The "Juneau Creeks Greenbelt Study", prepared by the CBJ with the assistance of the Alaska Department of Fish and Game in January 1984, lists possible mitigation projects for this section of Jordan Creek. These projects could be pursued as mitigation.

3. M9: Development of Wetland Unit M9 shall involve a site plan that shall consider: (a) restricting fill to the minimum amount necessary to achieve stated project purposes; (b) consolidating development; and (c) if development of the wetland is to occur in phases, the lower value areas shall be developed first to the extent practicable. Construction mitigation techniques shall be used to avoid impacts to the portion of the wetland that is not developed. This should include maintaining the hydrologic connection to the undisturbed portion of the wetland through Wetland Unit M10. The CBJ staff shall consult with the agency working group on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

4. MW5: Fill shall be restricted to the minimum amount necessary to achieve project purposes, and measures shall be taken to avoid impacts to portions of the wetland not developed. Applicants shall conduct mitigation that is appropriate to enhance the wetland values in the immediate area. For example, the applicant could be required to enhance waterfowl use of the area through development of waterfowl staging ponds on the CBJ-owned property (MW4) to enhance the regional ecological diversity of the area. The CBJ staff and Wetland Review Board shall be consulted to determine the appropriate mitigation strategy for any proposed project.

LIMITS OF THIS AUTHORIZATION:

1. These GPs and authorizations obtained under these GPs do not obviate the need to obtain other Federal, State, or local authorizations required by law, nor does it authorize activities denied by any State or Federal agency, or the CBJ.

2. These GPs do not convey property rights, either in real estate or material, or exclusive privileges; do not authorize injury to property, or invasion of rights, or any infringement of Federal, State, or local laws or regulations; nor do these GPs obviate the requirement to obtain State or local assent required by law for the activity authorized herein.

3. These GPs or authorizations obtained under these GPs do not authorize interference with any existing or proposed Federal project.

4. In issuing these GPs or authorizations obtained under these GPs, the Federal Government does not assume any liability for the following:

a. Damages to an authorized project or uses thereof as a result of the permitted or non-permitted activities or from natural causes;

b. Damages to an authorized project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest;

c. Damages to persons, property, or to other permitted or non-permitted activities or structures caused by the activity authorized by this GP;

d. Design or construction deficiencies associated with the authorized work;

e. Damage claims associated with any future modification, suspension, or revocation of one or more of these GPs, or authorizations obtained under these GPs.

5. This office may reevaluate its decision on the GPs, or any determinations made under these GPs, by either this office or the CBJ at any time the circumstances warrant. Circumstances that would require a reevaluation include, but are not limited to, the following:

a. The permittee or the CBJ fails to comply with the terms and conditions of a specific GP;

b. The information provided by the permittee in support of an application for authorization under these GPs proves to have been false, incomplete, or inaccurate;

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision; or

d. The CBJ itself is found to be party to violations of the Clean Water Act. If the District Engineer determines that this has occurred, the District Engineer may require verification of all projects by the Regulatory Branch of the Alaska District, Corps of Engineers, until such time as the issue is resolved to the District Engineer's satisfaction.

Such a re-evaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring the permittee to comply with the terms and conditions of these GPs and for the initiation of legal action where appropriate.

The permittee shall be required to pay for any corrective measures ordered by this office, and if the permittee fails to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise, and bill the permittee for the cost.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

Colonel, Corps of Engineers
District Engineer

Attachments

ATTACHMENT to GENERAL PERMITS 2000-01, 2000-02 and 2000-03

Note: These GPs are based on mapping by the Alaska District, Corps of Engineers, Regulatory Branch, as shown in the Juneau Wetlands, Functions and Values, Map Appendix, September 1987; many small wetlands not shown are protected by law, but are not included in these GPs.

Note: Shoreline Corridor Rule. Riverine and lacustrine shoreline corridors take priority over all other management categories and designations. All catalogued anadromous fish streams shall have a 100-foot shoreline corridor on each side of the stream, measured from the ordinary high water mark in the main channel up to the point shown in "An Atlas to the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes" indicating the presence of anadromous fish. The 100-foot shoreline corridor shall be designated and managed as Wetland Category A. There shall be a 100-foot shoreline corridor around lakes, measured from the ordinary high water mark of the shoreline; the lacustrine shoreline corridor shall only apply to bodies of water more than 20 acres in area with water depths in the deepest part of the basin exceeding 6.6 feet at low water. If the lacustrine wetland or adjacent palustrine wetland is Category A, then the 100-foot lakeshore corridor shall be Category A. In all other cases the lakeshore corridor shall be Category B. This rule applies only to wetlands; no uplands shall be included within the 100 foot A or B wetland corridors. The Shoreline Corridor Rule shall take precedence over the Residential Road Corridor Designation Rule, described below.

Note: The Residential Road Corridor Designation Rule is described on page 30 of the JWMP, February 1991, with further amendments by the Coastal Policy Council on October 31, 1991: The definition of "residential road corridor" is also discussed on page 5 of the revised JWMP, February 1997. It applies only to residential development on parcels where public water is already provided, the parcel is already affected by development and is subdivided into small lots. This rule allows residential development to be reviewed under Category C guidelines in cases where: (1) the residential parcel is in a development corridor served by public water and existing local access roads; (2) the property owner has no practicable upland alternative to wetland development; and (3) the proposal shall consist of only residential building pads and direct access to them. The Residential Road Corridor Rule is quoted in part here: "Undeveloped palustrine wetland residential parcels with no practicable upland development alternatives shall have a temporary 100-foot Category C designation corridor measured from the road frontage right-of-way,.... Developed palustrine residential parcels shall have a Category C designated envelope that is 30 percent larger than their existing fill footprint.... Undeveloped residential parcels with an upland practicable development alternative on the parcel shall retain their original designated management category."

M7, M9, M10, and M13: If development is proposed in Wetland Units M7, M9, M10 or M13, the applicant shall be required to conduct mitigation to support and enhance the functioning of Jordan Creek in the area owned by the CBJ in Wetland Unit M7. The "Juneau Creeks Greenbelt Study", prepared by the CBJ with the assistance of the Alaska Department of Fish and Game in January 1984, lists possible mitigation projects for this section of Jordan Creek. These projects could be pursued as mitigation.

M9: Development of Wetland Unit M9 will involve a site plan review process that will consider: (1) restricting fill to the minimum amount necessary to achieve stated project purposes; (2) consolidating development; and (3) if development of the wetland is to occur in phases, developing to the extent practicable the lower value areas first. Measures shall be taken to avoid impacts to the portion of the

wetland that is not developed. This would include maintaining the hydrologic connection to the undisturbed portion of the wetland through Wetland Unit M10. CBJ staff will consult with the appropriate Federal, State and local Borough/City resource agencies on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board.

M49, M51, and M53: These wetland units are re-classified as Category A wetlands. An individual Department of the Army permit will be required prior to the discharge of material into these wetlands, which were previously categorized as 'C' wetlands in GP 92-01 and in the JWMP.

WEST VALLEY

MW5: Fill will be restricted to the minimum amount necessary to achieve project purposes and measures shall be taken to avoid impacts to portions of the wetland that will not be developed. CBJ staff will consult with the appropriate Federal, State and local Borough/City resource agencies on these issues during the site plan review process and when preparing a recommendation to the Wetlands Review Board. Applicants will be required to conduct mitigation that is appropriate to enhance the wetland values in the immediate area. For example: the applicant could be required to enhance waterfowl use of the area through development of waterfowl staging ponds on the CBJ-owned property (MW4) to enhance the regional ecological diversity of the area. The appropriate Federal, State and local Borough/City resource agencies will be consulted to determine if this is the most appropriate mitigation strategy for the proposed project.

Road Corridor in MW11 along Engineer's Cutoff Road applies only to lots that are already developed; Road Corridor would allow 30% expansion of the existing fill sites subject to restrictions associated with road corridors and stream corridors.

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, in accordance with Section 401 of the federal Clean Water Act and the Alaska Water Quality Standards, is issued to the US Army Corps of Engineers Alaska District, Regulatory Functions Branch, Juneau Field Office, 8800 Glacier Highway, Juneau, Alaska 99801, for the proposed following general permits (GPs), covering wetland activities with the City and Borough of Juneau.

GP 2000-01 is for residential fill pads, site preparation, and driveways; GP 2000-02 is for commercial, community, and institutional development; GP 2000-03 is for wetlands functional enhancement, and GP 2000-04 is for roads and other linear development. The GPs authorize the discharge of fill material into wetlands within the City and Borough of Juneau, which have designated "C", "D", "EP", or as Road Corridors, in the Juneau Wetlands Management Plan. The objective of the GPs is to allow planned, systematic development of private and commercial lots, selected government managed areas, and expedite the permitting process for the previously mentioned wetlands types, while maintaining important wetland functions.

The department supports the use of General Permits by local governments. Therefore the Department supports continued use of the GPs that have been useful and have been demonstrated to streamline the permitting process.

Public notice of the application for this certification was given as required by 18 AAC 15.180.

Water Quality Certification is required under Section 401 because the proposed activity will be authorized by a Corps of Engineers permit, reference number SPN-2005-11, and a discharge may result from the proposed activity.

Having reviewed the application and comments received in response to the public notice, the Alaska Department of Environmental Conservation certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the Clean Water Act and the Alaska Water Quality Standards, 18 AAC 70.

Date

Jan 11, 2005



Kent Patrick Riley
Acting Program Manager

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF PROJECT MANAGEMENT/PERMITTING
ALASKA COASTAL MANAGEMENT PROGRAM

FRANK H. MURKOWSKI, GOVERNOR

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PIPELINE COORDINATOR'S OFFICE
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ANCHORAGE, ALASKA 99501
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www.alaskacoast.state.ak.us

December 19, 2005

Mr. Garth Zimbelman
U.S. Army Corps of Engineers
Regulatory Branch
8800 Glacier Highway, Suite 106
Juneau, Alaska 99801-8079

Dear Mr. Zimbelman:

**Subject: USACE – Renewal of General Permits 2000-01, 2000-02, 2000-03, 2000-04
for the City and Borough of Juneau
State I.D. No. AK 0512-05J
Project Deemed Consistent with ACMP**

On July 18, 2005 the Office of Project Management & Permitting (OPMP) received the Special Public Notice for the renewal of the General Permits (2000-01, 2000-02, 2000-03, 2000-04) for wetland fill in the City and Borough of Juneau. Typically, this would initiate the review of the proposed renewal under the Alaska Coastal Management Program (ACMP).

OPMP has consulted with representatives of the Alaska Department of Natural Resources' Office of Habitat Management and Permitting (OHMP), and received the following comments on August 10, 2005:

"Special Condition #4 pertains to the proposed relocation of Duck Creek for airport expansion. This condition is no longer relevant in the updated GP as CBJ has applied for an individual permit for this work. IF this condition is retained, the "Advisory" in #4 should be updated to reflect the change in authorities from ADF&G Title 16 to ADNOR-OHMP Title 41."

According to ACMP regulations [11 AAC 110.400(a) (1)], OPMP is to coordinate an ACMP consistency review of a project that requires a federal consistency certification, and is to be located within the State's coastal zone boundaries. However, according to ACMP regulations, [11 AAC 110.265(a)] a project's consistency review shall be completed within 90 days after receipt of a complete application, unless there are exceptional circumstances.

Due to staffing and workload constraints, OPMP was unable to start and complete the ACMP review of your proposed water diversion within the required 90 days [by October 18, 2005].

"Develop, Conserve, and Enhance Natural Resources for Present and Future Alaskans."

December 19, 2005

Therefore, OPMP is closing your ACMP consistency review file and deeming your renewal of the General Permits for the City and Borough of Juneau (2000-01, 2000-02, 2000-03, 2000-04) project to be "consistent with the standards and policies of the ACMP.

This action will allow the USACE to complete the internal review of the General Permit under their regulatory process and authority.

In light of this ACMP decision, you will not need to take any further action regarding an ACMP determination for your project. By copy of this letter, I am informing the Federal and State review participants of OPMP's decision. If you have any questions, please contact me at (907) 465-8791 or by email at ben_white@dnr.state.ak.us. The State appreciates your cooperation with the ACMP.

Sincerely,



Ben White
ACMP Project Specialist

cc: Jim Powell - ADEC, Juneau *
Wayne Dolezal - ADFG, Anchorage *
Brady Scott - ADNR/DMLW, Juneau *
Doug Sanvik - ADNR/DMLW, Juneau *
Jackie Timothy - ADNR/OHMP, Juneau *
Carl Schrader - ADNR/OHMP, Juneau *
Kim Kruse - ADNR/OPMP, Anchorage *
Joe Donohue - ADNR/OPMP, Juneau *
Margie Goatley - ADNR/SHPO, Anchorage *
Teri Canary - Coastal District, Juneau *
Sue Walker - NMFS, Juneau *
Chris Meade - USEPA, Juneau *
Richard Enriquez - USFWS, Juneau *
Garth Zimbelman - USACE, Regulatory, Juneau *

* = Emailed, ** = Faxed