

# JUNEAU COMMISSION ON SUSTAINABILITY ANNUAL REPORT JUNE 2020 - MAY 2021

# I. HIGHLIGHTS – Actions Undertaken by JCOS

The Commission held regular meetings and work sessions monthly via Zoom beginning in mid-June 2020. Much of the commission's work is researched and drafted by its committees. Working backwards from recent work, JCOS accomplishments include:

- In the past year and ongoing, JCOS has collaborated with the Assembly's Public Works & Facilities Committee (PWFC) and the CBJ Engineering & Public Works Department (EPWD) as they have actively pursued sustainability issues EV charging infrastructure, CBJ internal energy management & facilities upgrades, Juneau energy data update, solid waste issues, and CIP process. JCOS thanks PWFC and EPWD for making progress on these thorny issues in the past year!
- Beginning in May 2021, collaborated with CBJ Docks & Harbors on a federal USDOT (RAISE) grant application for \$20M-plus funding for electrical infrastructure and shore power equipment to electrify CBJ's two 16B docks. JCOS brings information on climate action, sustainability, and public/industry benefits to the grant process, and is gathering community and regional letters of support.
- Revitalized its public outreach efforts and initiated a new lunchtime Sustainability Session @ 12-1PM, on the 4<sup>th</sup> Thursdays of March (Air Quality Monitoring in Juneau), April (Refresher on Juneau's Renewable Energy Strategy) and May (Juneau's Solid Waste 101).
- In March 2021, provided the Assembly JCOS's report: Juneau Solid Waste Fact Sheet
  and Recommendations for a Course of Actions by the CBJ Assembly, which compiles
  background information and potential actions that can be undertaken to control the
  waste stream into the landfill and to develop a future alternative to replace the
  current landfill when it reaches its capacity.
- For the fourth year, assisted CBJ Capital Transit in its 2021 federal **FTA grant** application for additional electric buses and charging infrastructure by gathering several public support letters from a range of Juneau organizations and ADEC.
- In an ongoing basis, participated in several meetings of **Alaska municipalities** (elected officials, staff, and activists) as they collaborate and share information on climate

- actions, programs, and policies. The Alaska Climate Action Community of Practice is facilitated by UAA and the Alaska Center.
- In February 2021, responded to correspondence from Alaska Electric Light & Power (AEL&P) regarding a JCOS graphic on 2007-2019 electric sales data for Hecla Greens Creek Mine.
- In December 2020, proposed that the Assembly and City Manager use **Marine Passenger Fees for a Clean Port Initiative** addressing: dock electrification, electric buses and reduced congestion downtown, and reusable water bottles/water fill-up stations and reusable Juneau souvenir shopping bags to reduce tourist plastic waste.
- In December 2020, proposed to the Assembly an energy pathways contract to:
  - 1) update Juneau's 2010 energy use and GHG emissions inventory using now-standard global protocol;
  - 2) prepare a business-as-usual GHG emissions forecast to 2050, against which the community can gauge its progress; and
  - 3) create a dynamic modeling tool that enable Juneau to analyze priority JRES strategies to determine their effectiveness at achieving the community 80% renewable energy by 2045 goal.
- In November 2020, provided recommendations to the Assembly for its annual retreat sustainability goals-setting:
  - 1) track CBJ's energy use and costs;
  - o 2) continue support for electrification of transportation and space heating;
  - 3) update Juneau's 2010 energy use/GHG inventory and prepare an "energy pathways" analysis that quantifies specific actions that can be undertaken to achieve less reliance on fossil fuels by the community; and
  - 4) develop a solid waste strategy with priorities addressing waste reduction, waste diversion, and the eventual need for an alternative waste disposal site.
- As a multi-year effort, provided input to CBJ staff in November 2020 on incorporating
   CBJ sustainability goals into the operational budget and CIP process, including
   adding sustainability to the CIP criteria. JCOS supported existing CIPs EV planning,
   electric bus charging infrastructure, utility pump station upgrades, and deferred
   maintenance of CBJ facilities, and recommended additional CIP projects that
   implement the above-mentioned sustainability goals.
- Drafted two Mayor's proclamations for Energy Efficiency Day (October 7, 2020) and National Drive Electric Week -September 26, 2020). The proclamations, typically read at Assembly meetings, enhance public awareness about clean energy initiatives.
- Last fall, proposed a community Award for Excellence in Sustainability. The HRC approved the proposal, which is pending for consideration by the full Assembly.
- Last summer, advocated for two sustainability projects under the CARES-funded Juneau Art Works – Sustainability Infographics and Climate Solutionists, both aimed at raising public awareness of climate issues and successes.

- In June 2020, committed to host sustainability sessions as part of CBJ's 2020 grant application (unsuccessful) for *USDA Community Compost and Food Waste Reduction Project*. JCOS committed to work with CBJ staff on a new 2021 application.
- Provided ongoing feedback on the pending 2021 report: Juneau's Changing Environment Climate Impacts and Response, which is a collaborative effort spearheaded by JCOS and includes UAS and UAF scientists and municipal staff.

### II. 2021 PRIORITIES BY JCOS COMMITTEE

The Commission held its annual January retreat to identify goals and strategies for the calendar year and were cognizant of the CBJ Assembly's 2021 goals. The Commission continued existing Committees to address its 2021 priorities:

# Energy Committee- Steve Behnke (Chair), Duff Mitchell, Danielle Meeker

- Support, research, and identify funding for electrification of transportation (Juneau EV plan and charging infrastructure, federal FTA grants for electric buses, and cruise ship dock electrification).
- Support, and research ways to reduce fossil fuel use in buildings through energy efficiency and electrification of space heating (Alaska Heat Smart, building codes).
- Track energy efficiency upgrades of CBJ facilities and advocate for writing "success stories" to post on JCOS website.
- Research and collaborate on updating Juneau energy use & GHG emissions inventory.
- Advocate/collaborate on *Energy Pathways* analysis for modeling tool to identify incremental steps to achieve 80% renewable energy by 2045.

# Solid Waste Committee - Lisa Daugherty (Chair), David Teal, Gretchen Keiser

- Complete Solid Waste Factsheet.
- Identify near-term, effective actions on waste reduction and diversion.
- Present education to public and community organizations.
- Research potential federal funding.

# Outreach Committee – Anjuli Grantham (Chair), Gretchen Keiser, Lisa Daugherty, Jim Powell, Duff Mitchell

- Sponsor short (lunchtime) sessions on JCOS work, sustainability issues, climate impacts.
- Conduct in-depth Sustainability Sessions
- Initiate Sustainability Awards process, if approved by Assembly
- Showcase Juneau ArtWorks sustainability projects' outcomes.
- Maintain new JCOS website and post success stories

# Sustainability Indicators and Impacts Committee -Jim Powell (Chair), Duff Mitchell, Steve Behnke, David Teal

• Complete Juneau Changing Environment: Impacts and Solutions report.

Develop measurable sustainability indicators.

## III. OVERVIEW OF JCOS

The Juneau Commission on Sustainability, established by the Assembly in 2007, researches and advises the CBJ on community sustainability. The Commission's mission is to promote the economic, social, environmental, and governmental well-being of Juneau and all its inhabitants, now and in the future.

The Commission's powers and duties are to:

- Coordinate, propose, and promote sustainability initiatives among residents, businesses, government, and non-governmental agencies and education organizations through education and outreach programs;
- Make recommendations to the Juneau Assembly and CBJ Boards and Commissions on policies and programs that promote sustainability;
- Research and apply for grants or other funds or CIPs from public or private agencies for the purpose of carrying out any of the provisions or purposes of the resolution establishing the commission;
- Serve as an advisory group to the CBJ in reducing greenhouse gas emissions to target levels as adopted by the CBJ Assembly and;
- Act as liaison between the public and the CBJ Assembly on sustainability-related issues.

The JCOS is charged with additional duties from the Assembly when it adopted *Juneau's Climate Action and Implementation Plan* (CBJ Resolution 2593; November 14, 2011).

## Membership

The 11-member Commission includes nine public members appointed by the Assembly, and one non-voting member each of the Assembly and the Planning Commission. The Commission is supported by CBJ/CDD staff liaisons. The Commission's membership reflects environmental, social, economic, and governmental perspectives unified by the common interests of sustainability.

The JCOS members currently serving are:

Member	Term Expires	Member	Term Expires
Gretchen Keiser	6/30/2021, Chair	Anjuli Grantham	6/30/2021, Vice Chair

Lisa Daugherty	6/30/2022, Secretary	Duff Mitchell	6/30/2022
Danielle Meeker	6/30/2023	Steve Behnke	6/30/2021
Jim Powell	6/30/2023	Vacant	6/30/2022
David Teal	6/30/2023		
Alicia Hughes- Skandijs	CBJ Assembly Liaison (non-voting member)	Kenneth Alper	Planning Commission Liaison (non-voting member)
Beth McKibben	CBJ Staff Liaison		

Also, JCOS thanks others who served on the Commission during the past year:

Planning Commission Liaison: Erik Pedersen

**Public Member:** John Smith, who actively served on the Commission since 2015; Christine Woll, who served for several years most recently as Secretary; and Ed King who brought a helpful economics perspective.

# **Meetings and JCOS Committees**

The Commission holds its regular meeting on the 1st Wednesday of each month and work sessions on the 3<sup>rd</sup> Wednesday. During this report's time period, the Commission held 12 regular commission meetings, two special meetings, numerous work sessions, and the January 2021 annual retreat.

For additional background about the Commission, see Attachment 1.

#### IV. ACCOMPLISHMENTS FOR 2020-21

# A. Implementation of the Juneau Renewable Energy Strategy

JCOS continued to advocate for implementation of the *Juneau Renewable Energy Strategy* (2018), and the *Juneau Climate Action & Implementation Plan* (2011) – both adopted by the CBJ Assembly. Over the past year, JCOS focused efforts on the Assembly's goals to "make long term plan to achieve reliance on 80% renewable energy sources by 2045" and "develop a strategy to measure, track, and reduce CBJ energy consumption".

The JCOS Energy Committee is tasked with providing recommendations, and assistance when requested, to CBJ Assembly and staff on implementation of the four strategic areas of

#### JRES:

- 1. Implement a CBJ energy management program
- 2. Reduce Juneau's dependence on fossil fuels for space heating
- 3. Reduce Juneau's dependence on fossil fuels for transportation
- 4. Support efforts to provide new renewable energy supplies

The Energy Committee appreciates the Assembly's goal setting and the active engagement of the Assembly PWFC and E&PW Dept. on these issues in the past year. JCOS acknowledges the CBJ funding directed toward: partial (energy) staffing in E&PW Dept, research & planning for EV charging infrastructure, Alaska Heat Smart (heat pump conversions), and energy upgrades of CBJ facilities. JCOS actively participates in the annual CIP process and notes that progress may have been made in integrating sustainability into the City's CIP process.

# 1. CBJ Energy Management

The goal of this initiative is for CBJ to develop a comprehensive energy management program that allows for systematic consideration of energy use and costs in decision-making at all levels to identify potential energy savings. Internal actions by CBJ can also provide "success stories" as models for the public and private sectors.

The Assembly's aforementioned 2021 goal addressing CBJ energy consumption is a positive step, and the E&PW Dept. is taking concrete actions. Unfortunately, the collection of energy data – of both CBJ's usage and of the community in general - is a difficult task because of the way the information is reported to the city.

In the past six months, JCOS has received E&PW Dept. verbal reports and written energy analyses of several CBJ facilities being examined for energy efficiency upgrades, including the October 2020 bond-funded energy projects. Similarly, CBJ facilities maintenance staff are now tracking energy use subsequent to equipment replacements, renovations, etc.

## 2. Space Heating and Buildings

Over the past year, JCOS liaisons continued to participate in the roll-out of the Alaska Heat Smart program that assists homeowners to convert to heat pump space heating. Through March 2021, the project has assisted over 450 Juneau homeowners, and Juneau-specific heat pump calculations indicate an average savings of 40% in annual heating costs. The typical Juneau household heating system conversion will avoid s10,000 lbs. of CO<sub>2</sub> each year – the amount emitted annually by the average U.S. car.

Through the collaborative, US Dept of Energy-funded *Thermalize Juneau* project among Alaska Heat Smart, Cold Climate Housing Research Center at UAF, and Alaska Energy Light & Power (US Dept of Energy funding, JCOS has gained valuable information about what it takes to scale up space heating conversions in Juneau. JCOS continues to work with the full range of groups involved in energy efficiency and heating, including a coordinated effort on electrification of heating loads.

# 3. Transportation: Electric Vehicles

The JCOS has advocated for electric vehicles (EV) and charging infrastructure for seven years, helping to provide information and promote electric vehicle adoption in the community. Unlike many communities that rely either on private industry or government to provide public EV charging infrastructure, Juneau has benefitted from collaborative private-public partnerships.

Juneau continues as a leading EV adopting community and is one of the fastest growing EV communities in America. In the past 7 years, the number of electric vehicles has grown to over 500, with 1 to 2 new electric vehicles arriving in Juneau weekly. According to a 2019 report by Experian Information Solutions, which examined all EV sales, Juneau ranked 3<sup>rd</sup> in the Nation.

In the past year, JCOS shared its earlier EV plan outline (2018) and background knowledge with the E&PW Dept staff undertaking research on EV charging infrastructure.

JCOS continues to support efforts to acquire electric buses, both by the city and private companies. In March 2021, JCOS assisted Capital Transit staff developing a 2021 federal Lo-No grant by gathering numerous letters of support from a variety of Juneau organizations. In response to the 2021 grant process focus on air quality, JCOS reached out to ADEC and obtained a letter of support for the CBJ application.

# 4. New Renewable Energy Supplies

JCOS helps share information about the status of renewable energy supplies and projects in Juneau. As proposals to meet the other JRES goals through electrification of heating and transportation are developed, there is a need for better information about electricity supply, demand and costs, which is provided by the industry. JCOS sees its role as helping to make this information available to the public.

### B. Solid Waste

In its second year, the JCOS Solid Waste Committee produced an informative report describing the status and ongoing issues about solid waste in Juneau. The *Juneau Solid Waste Fact Sheet and Recommendations for a Course of Actions by the CBJ Assembly* (March 2021) provides background information and recommends specific actions going forward to begin to address the eventual closure of the existing landfill when it reaches capacity in about 20 years.

Committee members have actively participated in Assembly PWFC meetings as that committee and the E&PW Dept begin to research steps that CBJ could take to reduce waste and divert reusable materials from the landfill as a way to buy the community time before a new landfill is needed. JCOS also held a virtual sustainability session on *Solid Waste in Juneau* 101 in late May with approx. 18 attendees. The Solid Waste Committee anticipates that

other sustainability sessions on aspects of solid waste will be forthcoming.

#### C. Outreach

## 1. Sustainability Sessions

The sustainability sessions are intended to raise public awareness, discourse and education about sustainability topics relevant to Juneau. The Outreach Committee initiated a new format for short, lunchtime sustainability sessions in March – May. A speaker presents information for 30 minutes, followed by a 30-minute Q&A period. The three topics addressed: air quality monitoring in Juneau (March), Juneau Renewable Energy Strategy refresher (April), and Juneau's Solid Waste 101 (May). Additional sessions are in the works for 2021.

#### 2. JCOS Media Presence

JCOS maintains a website under the Community Development Department and also has a Facebook page. The above-mentioned JCOS sustainability sessions are recorded and posted, as are JCOS reports and meeting minutes. As JCOS members identify worthwhile articles or reports on sustainability topics germane to Juneau, these are also posted for the public.

# D. Sustainability Indicators and Impacts

### 1. Sustainability Awards

Drawing on models in other municipalities, the Sustainability Committee developed a Sustainability Awards concept, whereby a community individual, organization, business, or agency would be recognized for their efforts that achieve sustainability addressing a resilient economy, climate change and adaptation, energy efficiency in the built environment, public policy, natural ecosystems, transportation, solid waste reduction/diversion, food security, or public/community health. The JCOS would solicit and review applications and make a recommendation to the Assembly, which would select the annual award recipient. The proposal was approved by the Assembly HRC and is pending for consideration by the full Assembly.

## 2. Juneau's Changing Environment – Impacts and Solutions

The JCOS Sustainability Committee, in collaboration with the UAS and UAF scientists, is updating the original 2007 *Predictions of Climate Change Impacts* based on the latest information and understanding of climate change and its impacts. JCOS members anticipate reviewing a draft report, following a peer review, with completion in 2021.

# **ATTACHMENT 1: History of the Juneau Commission on Sustainability**

The governing legislation for the Juneau Commission on Sustainability is CBJ Resolution 2401am, July 9, 2007. The policy and purpose of the Commission incorporated the mission of the former Juneau Energy Advisory Committee, which was also repealed by Resolution 2401am. The Commission's 2010 sunset date was removed by CBJ Resolution 2528, May 19, 2010.

The membership structure of the Commission was altered in 2015. Resolution 2755; February 5, 2015 renewed the Commission and repealed an earlier Resolution 2718. The Planning Commission and Assembly Liaison members are now non-voting members and do not count towards a guorum.

In the past, many persons have actively served on the Commission:

**Public Member:** Carol Anderson, Nathan Arentsen, Kaley Bangston, Bob Bellagh, Kate Bevegni, Eva Varadi Bornstein, Sandy Boyce, Alida Bus, Amy Condra, Robert Deering, Susan Ely, Catherine Fritz, Myrna Gardner, Clint Gundelfinger, Dave Hanna, Lauren Heine, Scott Jackson, Zane Jones, Jonathan Kamler, Ed King, Linda Kruger, lura Leahu, Jeni Lefing, Sarah Lewis, Sean Lynch, Greg McEwen, Jim Rehfeldt, Sally Schlichting, Amy Skilbred, John Smith, Kate Troll, Sara Truit, Greg Smith, Nancy Waterman, , Rick Wolk, Gayle Wood, Lisa Weissler, Christine Woll.

**Assembly Liaison:** Bob Doll, Karen Crane, Mary Becker, Jerry Nankervis, Kate Troll, Maria Gladziszewski, Rob Edwardson, Michelle Hale.

**Planning Commission Liaison:** Dan Miller, Nancy Waterman, Nicole Grewe, Ben Haight, Mike Levine.

CBJ Staff Liaison: Maria Gladziszewski, Tim Felstead.

**Previous JCOS Chair:** Gayle Wood, Sarah Lewis, Sandy Boyce, Sean Lynch, Alida Bus, Nancy Waterman, Kate Troll, Lisa Weissler, Steve Behnke, Duff Mitchell.

Over the years, JCOS worked on several aspects of community sustainability through several past committees, including: Food Security (2016-2018; 2009-2011) Climate Action Plan Implementation (2012), Sustainability Indicators (2010-2012), Initiatives (2012), Energy (2014-2015), Energy/Greenhouse Gas (2009-2011), Solid Waste (2014-2016), Sustainability Chapter/Comprehensive Plan Update (2014), Built Environment, City Operations, and Transportation; Outreach /Accountability (2014-2015).