

# ASSEMBLY COMMITTEE OF THE WHOLE MINUTES

August 28, 2023 at 6:00 PM

Assembly Chambers/Zoom Webinar



## A. CALL TO ORDER

Deputy Mayor Gladziszewski called the meeting to order at 6:03 p.m. in the Assembly Chambers.

## B. LAND ACKNOWLEDGEMENT

Mr. Bryson provided the following land acknowledgement: We would like to acknowledge that the City and Borough of Juneau is on Tlingit land, and wish to honor the indigenous people of this land. For more than ten thousand years, Alaska Native people have been and continue to be integral to the well-being of our community. We are grateful to be in this place, a part of this community, and to honor the culture, traditions, and resilience of the Tlingit people. *Gunalchéesh!*

## C. ROLL CALL

**Assemblymembers present:** Mayor Beth Weldon, Deputy Mayor Maria Gladziszewski, Greg Smith, Michelle Hale (Zoom), 'Wáahlaal Gíidaak, Loren Jones, Wade Bryson, and Alicia Hughes-Skandijs

**Assemblymembers absent:** Christine Woll

**Staff present:** City Manager Rorie Watt, Deputy Manager Robert Barr, Acting City Attorney Sherri Layne, Municipal Clerk Beth McEwen, Deputy Clerk Andi Hirsh, Engineering/Public Works (Eng/PW) Director Katie Koester, Lands Manager Dan Bleidorn, Eng/PW Project Manager Nick Druyvestein, Emergency Programs Manager Tom Mattice, Assistant City Attorney Emily Wright, Assistant City Attorney Nicole Lynch, CDD Planner Irene Gallion, CDD Senior Planner Terry Camery

## D. APPROVAL OF AGENDA

Mayor Weldon stated that they are adding Resolution 3034 from the Public Works & Facilities Committee (PWFC) Meeting which met earlier that day. That was added to the agenda as item 6.

## E. APPROVAL OF MINUTES

The December 19, 2022, Assembly Committee of the Whole DRAFT Minutes were approved by unanimous consent.

## F. AGENDA TOPICS

### 2. Science of a Jokulhaup - Mendenhall River Flooding Event 8/5/23

*(No packet materials but a presentation was given at the meeting.)*

Ms. Gladziszewski informed members that today's presenters include Eran Hood from the University of Alaska Southeast, Jamie Pierce from United States Geological Survey, and Aaron Jacobs from the National Weather Service

Mr. Hood began the presentation titled "Monitoring, measuring, and modelling the Suicide Basin outburst flood". He displayed an aerial view of the Mendenhall Glacier and explained that the flood is originating from Suicide Basin. A photo from 1893 showed how Suicide Glacier flowed down and added ice to Mendenhall Glacier, but 120 years later, Suicide Glacier retreated and left an over-deepened basin which the Mendenhall Glacier created an ice dam in front of.

Ms. Gladziszewski asked about the ice melt flow. Mr. Pierce explained that melt flow from Suicide Glacier fills up the deepened basin.

Mr. Hood then explained in his presentation that Suicide Basin fills up with water every summer and releases water at an unpredictable time, which flows under the Mendenhall Glacier and into Mendenhall Lake. The basin is about three-quarters of a mile in length and about 1/3 of a mile in width.

Mayor Weldon inquired, when the dam releases, as to how much water is released. Mr. Hood said it has changed over time, and that this year the basin drained further than it had in the past. He explained that an important task is watching the water filling the basin and knowing, when levels start to go down, that is when basin is starting to drain; it is at that point that they then issue a flood alert.

Mr. Hood presented a timelapse of the basin filling up with water over the summer, sometimes over a meter per day. He showed a digital map of the basin, which can be used to calculate the exact volume inside the basin after it drains. The basin can hold about 14 billion gallons of water before it will start to flow overtop the ice dam.

Ms. Gladziszewski asked when the map was made. Mr. Hood answered that the maps were made after the basin drained. He elaborated that the map is how they got the 14 billion figures, but advised that, because part of the basin is ice and is always melting, the map is going to be different next summer. He stressed that the basin is a hard thing to monitor because of access as well as the ice chokes in the basin.

Mr. Jacobs showed members a slide showing prior water volumes in the basin going back to 2016. He stated that 2023 was the highest and fastest rising the National Weather Service has seen. He said it was hard to pinpoint when the water levels would stop rising because they did not know how much water was going to come out.

Mr. Smith asked for an explanation of the chart on slide 9. Mr. Jacobs explained that there is a graph showing the top four dam releases since 2016 on the x axis, the amount of water discharge on the y axis, and the time on the bottom of the graph. He noted that the dam outbursts happened about the same time. Mr. Hood added that the USGS maintains the Mendenhall River gauge, the data of which was used in the graph being presented. There have been years where the outburst flood happened and went unnoticed by residents. These large outbursts have happened over decades, and in looking at water data for the Taku River, levels are all over the place; the biggest flood 30 years in, or 8 years in, or 40 years in. He said they did not see this exact flood coming because they couldn't measure the basin as it had never drained that fully, which is what changed this year.

Mayor Weldon asked if the presenters have a theory as to why the event this year was the biggest. Mr. Hood said there are two reasons: the basin is expanding, and that the basin completely drained. There is a theory that, when there was more ice in the basin, and the basin started draining, that ice would clog the drainage hole making it leak over time, but now that there is less ice and the basin had a more complete drainage. Over the long term, there are two things happening: the Mendenhall Glacier is a dam and it is getting thinner, which is good because then less water can be held in the basin; the process of expanding and melting ice is out-competing the process of the dam going down. He said the exact drainage mechanism is impossible to study because they can't see it.

Ms. Hughes-Skandijs questioned Mr. Hood's comment about the glacier melting. Mr. Hood explained that there are two competing processes, the glacier melting and lowering the dam, and the icebergs in the basin melting and making room for more water.

Ms. Gladziszewski asked if there are any resources that could help monitor the basin. Mr. Hood answered that they need more drone surveys, and USGS may put more cameras and a lake level sensor in the basin. He said they need someone who has the skills to work on modelling the evolution of the basin.

Ms. Hale asked about the glacier in front of Suicide Basin moving and making a new glacial dam every year. Mr. Hood said that is correct, which means the position of the drainage hole moves down over time.

Ms. Hale then asked about community suggestions around doing controlled draining of the basin. Ms. Gladziszewski advised Ms. Hale to save that question for Mr. Watt following the presentation. Mr. Pierce offered that there have been minor efforts in Switzerland to relieve overburden of water.

‘Wáahlaal Gíidaak asked if there are comparable situations in the world. Mr. Pierce answered that this is a worldwide phenomenon and is increasing in frequency. Mr. Hood said with respect to mitigation, he has never seen anything on this scale. Mr. Jacobs said there is a robust monitoring system at the basin.

Mr. Smith asked how much the basin can hold and what the biggest outflow would be. Mr. Hood explained that they do know this data now, but the problem is that there is more ice melting next year between now and then. The only time they can get a precise measurement of the water the basin holds is right after it drains, so getting the measurement before it drains is the challenge. He noted that this outburst flood is probably one of the best studied and monitored outbursts on earth, but there is still a great amount of outburst dynamics that are unknown. Mr. Smith asked what would happen to the river if an outburst of the same volume happened again. Mr. Jacobs responded that it depends on where the river levels are to begin with when the basin starts releasing; if the river was at 5 feet, increased to 15 feet, and rose another 3 feet from rain fall, the river would be at an 18-foot crest before the glacial outburst flood even takes place. He stressed that it is difficult to say, at the onset, how much water is going to come out. Mr. Smith inquired whether the 18-foot figure can be monitored. Mr. Jacobs explained that CBJ and the National Weather Service partnered in 2011 to develop Mendenhall Valley inundation maps based on such outbursts, but it only went up to 15 feet. The maps will need to be redone to account for higher inundation levels, like 18 or 19 feet.

Mayor Weldon said, while she is aware of the Taku River having a history of floods in January, she cannot recall the Mendenhall River having a winter event. Mr. Pierce responded, “not outside of an atmospheric river, not from a glacier outburst flood.”

Mr. Watt then continued with a presentation of his own and reiterated Mr. Hood’s comment that the basin holds 14 billion gallons of water, and that Juneau now knows the most about such outburst floods in the world. Further, he stressed that Mr. Hood said, by 2050, the Mendenhall Glacier will recede, and Suicide Basin won’t be like this anymore, but the entire Juneau Ice Field behind the glacier might cause chaos as well. An extensive storm drainage system was made in the Mendenhall Valley in the 1980s, which runs the storm water to the Mendenhall River; during the recent event the drains backed up and flooded homes that were interior from the river. Regarding how to stop the water, He explained that slide gates could be installed on the storm drains, but the capacity of the pipes are not that great.

Ms. Gladziszewski asked Mr. Watt to clarify if he is talking about stopping the water from going into the drain or coming back out from the drain. Mr. Watt said he was referring to the water coming back up from the drains into the neighborhoods. He suggested that the city investigate buying storm drain gates and noted that there aren’t that many drains in the valley. He said the question is, for the interior homeowners who are low relative to where the river crested, is there something the city could or should do.

Mr. Watt returned to his presentation and addressed a question posed by the public, “could the glacier be bombed?” He doesn’t know if that could be permitted, nor predict what would happen, or know how to even get a bomb. Another question asked was whether water could be siphoned from the basin, which he said would be possibly doable but extremely complicated. Another question was asked as to whether a tunnel could be drilled to the bottom of the lake, which he said would cost millions of dollars, and there are icebergs in the basin. He explained that, in France, excavators were run up under their glacier and ditched out the basin, but Juneau’s issue dwarfs that solution. He stated that he does not think there is anything the city could do on a practical level other than try to understand glacier outburst floods more.

Mr. Hood offered that the siphoning idea sounds the most promising, but pointed out that you’d have to siphon more water than what is coming in the waterfall, which is not possible. The glacier is melting water

into the basin, so there is no way a siphon system could outpace that. He said the one benefit is they have new data from this outburst event and can do a better job of figuring out what the worst-case scenario is.

Mayor Weldon asked if the force of the river would just blow the storm drain gates away. Mr. Watt explained that the gate would be placed 10-20 feet back from the bank, so not right at the riverbank. He said there are two drains at Twin Lakes that have valves that open and close. There is also a duckbill drain on the Mendenhall River.

Mr. Bryson relayed a term he learned, fluvial geomorphology, which is the study of how rivers make their formations. He asked how the Assembly could bring in the right river experts to bring solutions. He pointed out that there is a part of the river by Riverside Drive called "Junk Car Bend," which is where a dozen cars from the 1950's were placed there. He suggested that river action may be more realistic. Mr. Watt said there are home and property owners making modest riprap bank armoring efforts on different segments of the river. If one were to try to do that for the entire river, it would cost about \$100 million and may not even be permissible. A question would also arise as to who would own these improvements. He recalled that, several years ago, a group of property owners were interested in leveraging federal funds to make improvements, and a proposal came to CBJ that would have had the city be a conduit for the federal funds but would have also had the city own and maintain the improvements, not the homeowners. He stressed that the only entity who could step in with that level of funding is the federal government, with improvements funded by them becoming a piece of municipal infrastructure, which he advised may be well beyond the means of the city. He said that nothing lasts forever, so bank armoring may be built but only have a short design life. Mr. Bryson stressed that a geomorphologist could provide more information about the river's dynamics. Mr. Pierce relayed that the Alaska Department of Transportation flew Light Detection and Ranging (LiDAR) drones down the entire river and lake, which will provide information on the geometry and banks of the river.

Mr. Smith asked if, in the short term, there could be an early warning monitoring system. Mr. Jacobs explained that the first thing to do is collect the LiDAR data and update the inundation maps, so that, when an event happens, CBJ emergency management would be able to convey a lot more information and forewarning to the public.

Ms. Hale commended the work on armoring riverbanks and asked that the Assembly be updated on what improvements are made. She said the LiDAR data is important.

*The Assembly took a break from 7:06 p.m. to 7:15 p.m.*

### **3. Telephone Hill Planning Process**

Ms. Gladziszewski informed members that CBJ Lands Manager Dan Bleidorn, CBJ Engineering/Public Works Project Manager Nick Druyvestein, and First Forty Feet Consultant James Brackenhoff would be presenting on the Telephone Hill project.

Mr. Druyvestein reminded Assemblymembers of the purpose of the Telephone Hill project, which is to study the newly acquired land and determine development options that optimizes land use and fulfill community needs. In speaking to the project's timeline, he said they are two months in to a 6-7-month process and they started Phase 1 of the project with a kickoff and site visit in June. He reported that a land survey of the hill was completed, and a base map was drafted and will be used for preliminary engineering work in the next phase. He stressed that understanding existing conditions is critical in developing design concepts, like utilities, parking, and accessibility. A sub-consultant with the project, Northern Land Use Research Alaska, is doing a Section 106 desktop analysis.

Mr. Brackenhoff provided background information about their company, First Forty Feet. He reported that they were in Juneau in July and engaged stakeholders, including individuals from Juneau Economic Development Council, the State of Alaska, the Juneau Chamber of Commerce, the property manager of Telephone Hill and the hill's residents. He said they were working to reach out to Tlingit & Haida, the Filipino Community, Friends of Telephone Hill, the Juneau Community Foundation and the Downtown Business

Association. He relayed that yesterday's open house with residents had 60 participants. At the meeting, they introduced the city's goals and objects for the site, as well as the anticipated timeline and when people can engage with the project. Residents were asked questions, input was gathered, and a mapping exercise was done so people could identify the hill's opportunities and challenges. His presentation included a summary of some of the input given at the open house. Residents conveyed that they want the hill to have a distinct identity; be a residential neighborhood with multi-family housing; prioritize creation of green spaces and public areas; for there to be walking and biking access; and a community-focused approach to redevelopment. He relayed First Forty Feet's summation of the input: "The aspiration for Telephone Hill is to forge an exceptional, vibrant new neighborhood dedicated to housing the people of Juneau; where the fusion of social, ecological, and historical treasures will amplify its character and provide a tapestry of experiences for public enjoyment."

Mr. Druyvestein outlined the next steps, which is finishing out Phase 1 by completing the building and historic survey. Phase 2 involves using the input and developing design concepts to bring to the public for more input, which will be the ongoing process until the plan is refined into something that can be brought to the Assembly for final consideration. He said he expects the final development plan to be ready in late November.

Mr. Watt advised members to look at the full presentation within the packet. He pointed to slide 9 of the full presentation, which shows a map of where those who provided public input on and what area of town they live and said there were 30 people from downtown but zero from Lemon Creek. He offered that the Assembly would have to answer the question as to whether this is a downtown project or operate at a high level of the Assembly goals as it relates to housing.

Mr. Smith asked if there is going to be broader public engagement. Mr. Bleidorn said they will do social media outreach for public meetings.

Mayor Weldon pointed to slide 12 of the full presentation and asked if the survey answer "public gathering space" was further specified, like whether the respondents wanted an indoor or an outdoor space. Mr. Bleidorn answered that they hadn't gone into too much detail as to what the green space would look like but said incorporation of the existing green space would be a part of the outcome.

Ms. Hale asked what the output of the process would be. Mr. Druyvestein responded that the outcome of the project will be a development plan with alternatives included and would be up for recommendation to the Assembly. Mr. Watt added that the last slide of the full presentation outlines the process of getting information back to the Assembly.

Ms. Gladziszewski asked if, at the next meeting, they will present development concepts to the Assembly for the Assembly to prioritize or add. Mr. Brackenhoff said they typically draw 3 different alternatives from feedback at their open house. In response to a follow-up question as to when they are going to do an open house, Mr. Druyvestein answered that the open house would be before they present ideas to the Assembly.

Ms. Hughes-Skandijs suggested that the presenters reach out and communicate with Tlingit & Haida and the Filipino Community group, if they haven't yet.

Ms. Hale said it is important that the Assembly talk about options they favor. She added that there is an opportunity for people to feel connected to Telephone Hill; while she understands that people from Lemon Creek or Douglas aren't coming to the meetings because they feel disconnected, this process may not be connecting people to the project. Ms. Gladziszewski said they intend to have that concepts discussion at the next Committee of the Whole meeting.

Mayor Weldon asked if looking at two more layers of parking was looked at, either for the neighborhood or all of downtown. Mr. Bleidorn relayed that they did not go into detail about the future uses of the parking garage site but did hear at the open house that people viewed the garage as an opportunity.

**4. Hazard Mapping Update**

[Click Here for a link to the online webpage for the Landslide & Avalanche Map materials.](#)

Mr. Watt reminded Assemblymembers that the city undertook hazard mapping in the downtown area in the 1970s and adopted maps as well as companion code to limit development in hazard areas, both avalanche and landslide. This was done at the time due to historic avalanche and landslide events downtown that led to loss of life and loss of property. Now for the past 40 years, there have been efforts to update the maps due to its weaknesses, one being that code treats avalanche and landslides the same, and another being that the city's Title 49 code doesn't always make sense. He relayed that the city had the opportunity to get grant funding to update the maps, and that staff felt that more accurate mapping in code made sense for the public. He recounted that the Assembly had this topic before them last year. It went to the Planning Commission, then the Lands, Housing, and Economic Development Committee took it up and amended it.

Ms. Gladziszewski asked why CBJ is considering hazard maps at all. Mr. Watt responded that CBJ has existing maps and code that are outdated and inadequate. The Assembly must answer the question as to whether to provide information, restrict development, or do nothing.

Mr. Smith inquired if there is any federal requirement to adopt hazard maps, since there are requirements to do flood mapping. Mr. Watt answered no, there is not a federal required, and explained that flood mapping is done so residents can get flood insurance. In this case, CBJ got a grant to do mapping, and as long as the city completes the project, the conditions of the grant are satisfied, and the project can be stopped or continued. Mr. Smith asked for more clarification. Ms. Gladziszewski stated that there is no federal requirement to adopt hazard maps.

Ms. Hale recalled that years ago, an avalanche took out houses, the cold storage, and an apartment building; there was a high road on Mount Roberts that went to the mine, which was a very probable cause. She's concerned that, if CBJ doesn't have development codes, whether there would be anything preventing people from doing things that are going to endanger others.

Mr. Bryson asked what action could the Assembly do that would allow citizens to build on their property, that banks would provide loans to citizens for property in certain areas, and allow insurance companies to ensure the properties, and yet get enough information to the public so the city is not liable and not putting people in harm's way?

Community Development Director Jill Maclean responded that one of the reasons to address the current maps is because they are not clear, as they are dated and conflate avalanche areas and landslide areas. Her understanding is that those property owners in the avalanche areas don't dispute being designated as being in an avalanche area, but they do dispute being in a landslide zone. Since the current maps conflate avalanche and landslide, residents can't prove differently. Insurance companies have been tightening up and view the properties as one in the same. She stressed that the city is doing a disservice to those living in the avalanche zone by keeping the maps as they are. Regarding Ms. Hale's comment, she said this is one area of the city that is mapped, and that she knows there are hazards throughout the borough; it's not unique to just downtown to have avalanches or landslides. She explained that they permit in other hazard areas according to the land use code, like requiring a hillside endorsement if there is an 18% slope. Mr. Bryson asked what action the Assembly could take to clarify the maps. She responded that the current maps and codes don't work and are inequitable since they only apply to the downtown area. She suggested repealing what isn't working, and that CBJ put out what information they have and educate the public.

Ms. Gladziszewski reminded Assemblymembers that there is a memo from the City Attorney within the meeting packet regarding city liability.

Mayor Weldon thanked the public for reaching out to the Assembly about this matter. She asked what would happen if they separated the avalanche and landslide areas, and how would homeowners be affected if they adopted the avalanche maps but not the landslide ones. Ms. Maclean answered that that would hopefully clarify for the insurance companies that these properties are avalanche zones, but if the new avalanche maps were adopted and replaced the current ones, members of the public might ask why the city is regulating one hazard and not the other.

Ms. Gladziszewski noted that adopting the maps doesn't mean they have to regulate them.

Ms. Hale pointed to option 6 from the CDD Director Memo of 8/25/2023 which states: ***"Option 6 repeals the adopted maps and ordinance and does not adopt the Tetra Tech maps and study; and does not conduct any public informational outreach."*** A member of the public suggested that, rather than adopting the maps, the Assembly just accept the maps. She said the question is whether the Assembly wants to regulate further than that. By accepting the maps, they would not be legally adopting them, but would be making them available to the public.

Mr. Smith shared that he reached out to a lender, two appraisers, and an insurance agent. He offered his understanding that a lender will look to the appraiser, and the appraiser can say what kind of insurance is required for certain types of loans. He said they are currently looking at the adopted 1987 maps. If the Assembly adopted the new maps, there would be changes in insurance requirements, which affects who can get a mortgage since it requires a certain type of insurance for their financing. If the Assembly changes out what people are looking at to make these determinations, he said it seems that there are areas of risk and hazard that they have not evaluated. He stated that it seems unfair that the areas of downtown that the city has done studies for would be penalized, even though someone could be in the same hazard in an area that was not studied. He asked whether people are providing feedback on how changing the maps would affect people's ability to finance.

Ms. Maclean relayed that she and Planning Manager Scott Ciambor have had conversations with two insurance agents and said they were not able to give strong advice with all the variations that could happen on a single property. Mr. Watt added that there are several kinds of structure variables: multi-family or single home, a new build or existing, refinanced or existing mortgage, etc. He said the variables also change over time, an example would be that, when a national event happens and insurance companies pay out, they tighten down on what they insure and make available. Mr. Smith said it seems the impacts of adopting the maps, just for public information only, are unknown. Ms. Maclean answered that was correct.

Mayor Weldon asked Ms. Maclean to confirm that the 18% slope requirement has nothing to do with whether the Assembly adopts the maps. Ms. Maclean answered that was correct.

Ms. Hughes-Skandijs pointed out that the conversation earlier focused on hazard warning. She concurred with Mr. Smith in that there is inequity in only having studied one area and not the others. She suggested that, if CBJ wanted to inform residents that they are in a hazard area, the city study other parts of town. She said she is looking for something that would inform folks that they're in a hazard zone, but she is unsure about regulation as so much of Juneau is a hazard zone. She asked if there is an option that separates landslide and hazard.

Ms. Hale suggested putting these suggestions out to the public and coming back in three weeks to hear feedback.

Ms. Gladziszewski offered her understanding that not all communities have adopted hazard maps, and in some cases have taken the maps back. She asked, knowing that such maps are not required but CBJ did them anyway in the 70s, what is the tradition nationwide of having adopted maps like Juneau has. Ms. Maclean said she can't speak on the nationwide part but can investigate that question for the next Committee of the

Whole meeting. She recalled that the Assembly had requested the manager and staff to apply for FEMA grants to do the hazard studies in 2016. Mr. Watt shared that, in 1961, there was a big avalanche event in the Behrends chute, and homes experienced significant damage. In the 1920's and 1930's there were big mudslide events above South Franklin Street. He said that the mapping in the early 1970's was done because Juneau had just formed the borough and the hazard events were much closer in time than today; between 1900 and 1960, there were about 6 avalanches in the Behrends chute that made it to tidewater, and there have been none since. In response to Ms. Hughes-Skandijs question about avalanches and landslides, he said the question can be split and answered philosophically differently.

Mr. Smith sought confirmation that the current maps cover a mile out Thane Road to a couple miles from the Federal Building and going out Glacier Highway and is only on the Juneau continental side. Ms. Maclean said that was correct. Mr. Smith asked how much it would cost to do hazard mapping for the entire borough. Ms. Maclean said she doesn't know at this time but can find information from the grant and bring that information back to the Assembly.

**MOTION by Mayor Weldon that the COW forward [CDD Director Memo of 8/25/2023] Option 6, with the removal of two words so that it reads: "repeals the adopted maps and ordinance and ~~does not adopt the Tetra Tech maps and study, and does not conduct an annual~~ any public informational outreach" and she moved it to the full Assembly.**

In speaking to her motion, Mayor Weldon stated that she wants to keep the maps on the CBJ website. With respect to public information and outreach, she said she wants to keep it generic. She suggested including a paper in the tax assessment notices that states, "if you live on a slope, be aware that you may be in a hazard zone" and then also provide links to the maps. She explained that she is moving this to the full Assembly for public input, and if the public says the proposal isn't what they are looking for, then it could come back to the Committee of the Whole.

Wáahlaal Gíidaak said she would like to see a component that notifies renters of the hazards, as well as a continuous outreach process since the memo mentions an annual outreach effort. Mayor Weldon added that she meant to include the words "an annual" in the motion. She said she is unsure though how to address the renter question.

Ms. Hughes-Skandijs asked Mayor Weldon, if an annual outreach would be conducted, why would the city not adopt the maps if the city is suggesting looking at them. Mayor Weldon explained that if the city were to adopt the maps, then it would look like the city is going to do some kind of regulation. She offered her understanding that adopting the maps would not help homeowners.

Mr. Jones said if this were a question before the full Assembly, he would be a no; it ignores some responsibility the city has for public safety, especially if the Assembly is wanting to move toward higher density and downtown housing. He said it's okay to notify the owner, but what about the residents of the apartments. He suggested not putting the maps on the website if members do not believe they are accurate, as people will assume the government supports the maps if they are on an official government website. He said it is wrong if the Assembly doesn't support the maps, but then also says "We don't think they're right, but you know, here you go, take a look and maybe you want to make a decision." He stressed that there'd be some public relations problems by putting maps that the Assembly does not believe in on the website and saying, "Okay public, be aware, but we take no responsibility for anything that happens to you or your renters or any other citizens or your family."

Mr. Bryson said that, while he concurs with Mr. Jones that the Assembly doesn't want to allow the community to haphazardly develop, there are property owners who need answers on how to navigate this and do what they want with the property they own. He pointed out that there isn't new multi-family housing



being developed downtown, or any development downtown. He said there is some level of risk no matter where one lives, and that no government action is going to absolve the Assembly of that.

Ms. Hale said she disagrees with Mr. Jones' comment that not adopting the maps conveys that the Assembly does not believe the maps, the Assembly does believe in them but understands that adopting them would wreak havoc. She pointed to Sitka as an example, since they had adopted hazard maps and then unadopted them because of the havoc on homeowners. She asked Ms. Maclean to confirm that example, as well as speak to what the requirements are for hillside endorsement if there is an 18% slope. Ms. Maclean deferred the Sitka question to Mr. Watt. She explained that the hillside endorsement applies in situations where there is an existing 18% slope, and when a slope in excess of 18% is going to be created. The property owner has to apply for a hillside endorsement with a geotechnical analysis created by an engineer licensed by the State of Alaska. Mr. Watt said he'll follow up with members regarding the Sitka example.

**Amendment #1 by Ms. Gladyszewski to require CBJ to notify permittees who are developing within the boundaries of the maps, that the maps exist.**

Ms. Gladyszewski stressed that these kinds of studies, if they are not in ordinance, can get forgotten. She said the city has more information than before, and though the new maps are imperfect, they are better than the 30-year-old maps.

Ms. Hughes-Skandijs objected for the purposes of discussion. She sought confirmation that the motion repeals the old maps and ordinance, puts the new maps accepted by the Assembly on the CBJ website, with annual outreach, and informs developers that they are in a hazard zone. Mayor Weldon interjected and explained that the motion makes a requirement that, when someone applies for a permit, they are notified they are building in a hazard zone. Ms. Hughes-Skandijs removed her objection.

Mr. Smith asked for further clarification. Ms. Gladyszewski said that the city has information, and the public should know about it, and that she wants people who develop in these hazard zones to know they are in a hazard zone.

***With no further objection, Amendment #1 was adopted by unanimous consent.***

Ms. Hughes-Skandijs objected to the main motion for purposes of a question. She referred to the 8/25/23 memo from Ms. Maclean and pointed to the below table from page 2, which outlines the number of properties within the hazard zones between the 1987 maps and the proposed 2022 maps.

	<b>1987 Adopted Maps</b>	<b>2022 Proposed Maps</b>
Number of properties within the mapped study area	1108	1150
Number of properties within high/severe landslide and avalanche zones	173	381*
Number of properties within the 1987 adopted severe zone, but out of the 2021 proposed high/severe zone	16	N/A
Number of properties within the proposed 2021 high/severe zone, but out of the 1987 adopted severe zone	N/A	217

*\*In the previous memo to LHEDC, the number stated was 374. With additional properties on Calhoun Ave., the number is 381.*

She asked for the number of properties that are in an avalanche zone but not in a landslide zone. Ms. Maclean offered to follow up at the next meeting with that information. Ms. Hughes-Skandijs said she does

not like the current option (6 in the present motion) and would prefer Option 5 from the memo, but also still wants to see public testimony on this motion.

The following was Option 5 from the memo:

*Option 5 adopts a path developed by staff in response to the concerns raised by the Commission and the public. This option repeals the current maps and current ordinance; and adopts the moderate and severe avalanche areas, and the moderate, severe and high landslide areas developed by Tetra Tech for public information purposes only. Additionally, the CBJ would annually notify the property owners in the moderate and severe avalanche areas and in the moderate, severe, and high landslide areas, and properties within 500 ft. of these mapped areas for awareness purposes; and requires property owners in the hazard areas to notify renters of the hazards (Attachment D). With the addition of a CUP requirement for development greater than a single dwelling unit, this option would be similar to the COW discussion from 12/2022.*

She said they have received a lot of good feedback from the public and would like to have them weigh in on a choice. She asked Mr. Watt about the possibility of putting a different option to be considered on one Assembly agenda for public input. Mr. Watt answered that it would be unusual, awkward, and confusing to have two competing actionable items on the same Assembly agenda asking for public testimony with the ability to decide on one or the other. He suggested that, if the Assembly wants testimony if they were narrowing options, the Assembly can just ask for public testimony at a COW meeting or other venue for that purpose. Typically, then one item is then forwarded to the Assembly for public hearing and adoption if it is expected to pass with or without amendments.

Ms. Hale relayed that in Sitka, after their landslide, had done studies and adopted maps and then a year or two later the Sitka Assembly un-adopted the maps because of insurance and mortgage issues.

Mayor Weldon responded to Ms. Hughes-Skandijs that she looked at option 5 from the memo as well but opted for option 6 because downtown is not the only area of the borough where there are problems. She noted that there are issues in Douglas, North Douglas, anywhere that there is a slope and that is why she thought about doing a more general information to be aware of general hazards all across town.

Ms. Hughes-Skandijs, in speaking to her objection, said that that to not adopt something but then refer to it seems crazy to her. She said that, during the outburst flood, she was curious if that would change the tune of the hazard mapping conversation. She said it doesn't make sense for CBJ to be very concerned about river hazards, but not be concerned about avalanche and landslide hazards. She said that lots of Juneau is a hazard zone and she is having some cognitive dissonance there. In order to move this item forward, she removed her objection to the motion but said she isn't sure how she will eventually vote on any action to come before the Assembly.

Mr. Smith commented that the city has assessed the hazard risk of just a small area downtown, and if the city were to send out to renters in the area of the risk, then they are unfairly impacting people that are in the area without studying the risk across the borough. He said he is okay with the proposal as it is the least bad option and is okay with this moving forward to obtain public comment.

'Wáahlaal Gíidaak asked why renters were left out of being notified. Mayor Weldon answered that she didn't know how that could be done and if someone comes up with a great idea on how to do that, she would support it.

Ms. Gladziszewski said the Assembly has received a number of comments from the public and a lot of good suggestions but she would like to put this information out to the public and receive public comment back on this proposal in particular.

Ms. Hale responded to Ms. Hughes-Skandijis about not adopting the maps and said there is not much dissonance between that and the hazard mapping as they both relate to making the city's residents aware of the hazards.

***With no further objection, the motion, as amended, was adopted by unanimous consent.***

*The Assembly took a break from 8:34 p.m. to 8:50 p.m.*

**5. Alaska Electronic Light & Power (AEL&P) Update**

*(Clerk's Note: Due to travel schedules, AEL&P provided paper copies of their presentation to the Assembly and the public at the COW meeting. Electronic copies were posted to the online agenda packet under "Supplemental Materials" on Monday, August 28.)*

Ms. Gladziszewski informed members that CEO Alec Mesdag would be presenting on behalf of AEL&P. Assemblymembers were invited to ask questions of Mr. Mesdag throughout the presentation which he answered.

Mr. Mesdag gave a lengthy presentation on the status of AEL&P and all of Juneau's hydro generation sources: Salmon Creek, Gold Creek, Annex Creek, Lake Dorothy, and Snettisham. Some of the highlights of his presentation included the following:

- Their biggest project this year is replacing the Annex Creek penstock, the pipe for which is over 100 years old. They will replace half this year and half next year.
- They are looking out for programs, regarding power transmission, in the Infrastructure Act and the Inflation Reduction Act as AEL&P are now eligible for some of the federal grants.
- They are working with Docks & Harbors on dock electrification.
- They are working on using LiDAR surveys for vegetation management along the Snettisham line.
- They have about 50 to 60 new residential services and about a handful of multifamily homes a year.
- They have been decreasing the total average amount of time that every customer experiences an outage and if all of the outages in 2024 were combined, big and small, average response time would be just under an hour. [The five-year average is about 4 hours, while the national average was about 7 hours.]
- They are planning to retire the diesel generators in the Gold Creek plant, and following the replacement of the Annex Creek penstock, they will be replacing the Salmon Creek penstock in 2025.

Mr. Mesdag explained their new advanced metering infrastructure, or AMI, which communicates hourly energy use. He explained that this system provides better information about a home's energy use. He noted that the peak usage time in the day is 8pm. To help alleviate the potential issues created by too many electric vehicles charging during the evening peak, AEL&P created an off-peak EV Rate Schedule in 2017. Off-peak hours were from 10pm to 5am, and within that period, 11pm to 12am are the peak hours since most EVs only take about 90 minutes to two hours to fully charge.

Mr. Mesdag then presented a residential electricity cost comparison and addressed the rates they charge and when and by how much they may be increasing. AEL&P's current rate of 12.35 cents/kwh, falls below the national average.

Mr. Bryson asked what AEL&P's rate request was and what the Regulatory Commission of Alaska (RCA) rate was. Mr. Mesdag answered that AEL&P requested a 9% rate increase, and the RCA's starting point was a 1.5% increase; therefore, the rate increase will fall somewhere between 1.5% and 9%. AEL&P's current interim rate is at 4.5%, which is refundable if the Commission determines a rate lower than 4.5%.

Ms. Hughes-Skandijs asked if there is a limit to what AEL&P can request in a year. Mr. Mesdag said there is a statutory formula they must follow when submitting a rate request.

Mayor Weldon asked why AEL&P is requesting a 9% increase. Mr. Mesdag explained that it is a combination of investment they made in 2016 and their last general rate case was filed in 2016. They filed in 2022 per a stipulation agreement that concluded the 2016 rate case. He explained that what had changed is an inflation of expenses.

Mr. Smith inquired if the cost of electricity is expected to keep going up. Mr. Mesdag explained that AEL&P passes through all their expenses to customers. They recover the cost of debt, taxes, and a return on equity on shareholder capital. When they invest capital in the system, they do it with a combination of debt and equity. He pointed out that, due to depreciation, the amount they invest in the system is offset by the amount that existing assets depreciate. He noted that there was a rate decrease after the Tax Cut in Jobs Act, which lowered their federal income tax rate and led to a rate decrease in 2018.

Mr. Mesdag continued his presentation at slide 15 and looking forward to the future. He noted that 20% of their energy sales come from their interruptible customers, one of which is Green's Creek Mine; the additional revenue plays a significant role in keeping rates lower. He noted that the number of firm customers are growing slightly. He commented that they are well within their ability to serve the community with their existing hydroelectric resources.

Ms. Gladziszewski asked, how the electrification of cruise ship docks might affect the energy load and capacity. Mr. Mesdag answered that the comparison between residential energy and cruise energy, the electrified docks with two ships connected would be about 8 to 10 gigawatt hours a year while their total energy sales are 400 gigawatt hours a year. Ms. Gladziszewski asked if they have the capacity to serve that. Mr. Mesdag said there are times they would have energy available and there are times they would not have energy available, which is why cruise ships are considered one of the interpretable customers.

Mr. Mesdag explained changes to heating loads. The graph shows the amount of energy consumed each day over the past few years compared with the heating degree days, which represents the magnitude of the heating load. In each of the past few years, the amount of energy used as the weather gets colder increases. He said this likely indicates that they are seeing more energy used for heating. He said AEL&P is involved with efforts to better understand how heat pumps use energy. They are conducting more studies examining growing space heating loads.

Mr. Smith relayed that on-bill financing was discussed at an Assembly Committee of the Whole meeting and offered the understanding that AEL&P is not interested in pursuing it. Mr. Mesdag responded that an obstacle is a law which requires utilities that are regulated by AS 42.05, if they do on-bill financing, to offer a warranty for the improvements for the life of the financing. He said the Alaska Department of Law was concerned about the transferability of debt from one customer to another. He explained that a benefit of such financing is the ability to transfer debt with the account; the Department of Law determined that would not be appropriate unless the original person who assumed the debt also provided a warranty for the improvements for the life of the financing. Mr. Smith asked about the warranty on heat pumps and whether it matches what a typical on-bill financing repayment schedule would be. Mr. Mesdag answered that it would not. He said AEL&P is unlikely to want to implement an on-bill financing program to support oil to heat pump conversions because of the impact it may have on customers who are not able to make those improvements themselves. If they start constructing new infrastructure to support increasing heating loads, the costs are going to be born disproportionately by people who live in low income multi-family housing with electric baseboard heat.

Ms. Gladziszewski sought clarification that AEL&P would be interested in on-bill financing for converting resistance heat to heat pumps, but not for home heating oil to heat pumps. Mr. Mesdag answered yes and that they are interested in ensuring that they're able to respond to growth in a way that allows them to maximize utilization of the infrastructure that they are already paying for.

Ms. Hale asked whether a person who has a heat pump adds resistance heat at very cold temperatures. Ms. Mesdag explained that when it is 30 degrees outside, a heat pump performs a lot better than resistance, but when it is zero degrees outside, they perform only slightly better than resistance. Ms. Hale asked, since there is growing interest in electrifying heat, what will AEL&P do when they don't have enough power. Mr. Mesdag answered that they are studying heat pumps to model what that transition is going to look like and how it will impact planning for new infrastructure. He said he is interested in finding ways to make room for oil to heat pump and electric vehicle conversions that doesn't require AEL&P to build a new expensive asset in response. He stated that increasing space heating loads is the one change that has the greatest impact to AEL&P's need for new infrastructure. The reason they encourage leading electrification efforts with transportation is because the nature of the load is more compatible with existing infrastructure.

Ms. Gladziszewski sought confirmation that increasing electric vehicles that charge at midnight is better than not. Mr. Mesdag answered that it is simpler for AEL&P to serve those loads with its existing hydropower and infrastructure, as well as far easier to accommodate fuel switching with vehicles than it is to accommodate fuel switching with space heating. Ms. Gladziszewski asked what AEL&P's next steps are. Mr. Mesdag said it depends on what is changing in the system and what the right response is. His presentation then covered the monthly energy uses at the various charging locations around town where the chargers are metered separately. He pointed out that there is increasing use over time. He said his hope is to build an electric vehicle charging station that would allow AEL&P to use their existing meter collection system in order to make public charging available more broadly. He said they are working on incorporating more electric cars to their fleet. He added that there is a lot of educational material that is sent out to the public.

Mr. Bryson had asked earlier in the meeting what AEL&P's relationship is with Juneau Hydro. Mr. Mesdag said that regarding AEL&P and Juneau Hydropower; there has not been any change regarding the interconnection process. He said systems have changed since their last impact study in 2018, but when they reached out to Juneau Hydropower last October to update the study, Juneau Hydropower did not respond. The facilities study with Juneau Hydropower also has not been completed, which is part of the interconnection process.

Mr. Bryson asked how the Regulatory Commission feels about this. Mr. Mesdag responded that, since AEL&P does not have any power lines that cross a state line, they are not regulated by the Federal Energy Regulatory Commission when it comes to this type of transmission interconnection, and though AEL&P has hydro plants regulated, this kind of interconnection is not something that the Regulatory Commission of Alaska regulates.

Mr. Smith asked who determines when a system impact study needs to be revised. Mr. Mesdag answered that it is per prudent utility practice; they determine based on their understanding of what has changed in the system. He added that they would need interconnectivity agreements approved by the RCA before they go into effect.

Ms. Gladziszewski asked for clarification, does AEL&P need to do anything to complete the interconnection agreement or does Juneau Hydropower. Mr. Mesdag said Juneau Hydropower needs to act.

'Wáahlaal Gíidaak asked if AEL&P can partner with Tlingit & Haida or Douglas Indian Association for Indian energy grants. Mr. Mesdag said they are investor-based utility but does not have an answer.

Mayor Weldon sought confirmation that AEL&P is looking to replace the Salmon Creek penstock. Mr. Mesdag answered yes, the upper portion of the penstock will be replaced with a larger diameter pipe, which could lead to more energy being produced at the plant.

Mr. Smith asked about a proposal where, if AEL&P pays for an installation that's going to reduce someone's power, that could go towards the cost of equity. Mr. Mesdag said he was discussing an idea where, if it is cheaper to install an energy efficiency measure compared to building a new generator, it would be better for all customers to do the low-cost option. He explained that his hope is to answer the question: if there is a

program they could obtain and make additional energy available for other uses at a much lower cost than building a generator, would it be allowed by the RCA to recover costs related to that type of program. He noted that the only way AEL&P makes money is by building new things. He said that when they talk about wanting to delay the need for new generation, he is also saying delay making money; they want Juneau to have stable energy prices.

Ms. Hale thanked Mr. Mesdag for his comments on keeping rates low and asked how AEL&P reconciles the drive to get off heating fuel in order to help the climate. Mr. Mesdag said it is important to respond to climate change and reduce emissions, and that serving customers with renewable resources is a corporate mission. He stressed that it is important to lead the emissions reduction charge with transportation because that can be accommodated with the growing space heating load.

**G. NEW BUSINESS**

**6. Resolution 3040 A Resolution Regarding the Allocation of the Hotel-Bed Tax.**

Mayor Weldon advised that she is not seeking a motion, just a will of the body. She explained that the resolution came from the Assembly Public Works & Facilities Committee, which believes that they need a special Assembly meeting because public comments closes on September 3. She asked Mr. Barr to speak to this.

Mr. Barr relayed that he spoke with the State Department of Transportation (DOT) Southcoast Director, who advised that they can avoid the issue of being late on public comment with a formal resolution if the city can submit preliminary public comment by the deadline.

Ms. Gladyszewski asked if there is an objection in having staff write a letter to DOT following the language of the resolution. There was no objection.

Mr. Bryson stated that the Public Works committee's will was to make sure that the resolution be considered in the State Transportation Improvement Plan (STIP). He said that, since Mr. Barr is assuring members that DOT will accept the resolution after the deadline, then that satisfies the committee's will.

**H. UNFINISHED BUSINESS - none**

**I. STAFF REPORTS - none**

**J. NEXT MEETING DATE - September 18, 2023; 6:00p.m.**

**K. SUPPLEMENTAL MATERIALS**

**7. RED FOLDER - Suicide Basin Brief**

**8. RED FOLDER - Suicide Basin Presentation to Assembly COW**

**9. RED FOLDER - Science Panel - Drainage Ideas**

**10. RED FOLDER - AEL&P Energy Update**

**L. ADJOURNMENT**

*There being no further business to come before the Assembly, the meeting adjourned at 9:49p.m.*