

# Iverson Task Force Meeting Notes

## 9/27/16

### Attendance

Eric Egbers (Homeowner)	Dawn Pucci (IC DNR)
Jim McDavid (IC Parks)	Cliff Marston
Jay Lawrence (Homeowner, Mosquito Control District & WRAC)	Carol Gellespie (WRAC)
Rob Howie (Homeowner)	Carston Curd
Ian Miller (WA Sea Grant)	Celine Servatius (concerned citizen)
Nicole Fagen (WA Sea Grant)	Joel Servatius (concerned citizen)
Paige Logan (UW Grad Student)	Katheryn Wells (Snohomish County Conservation District)
Robert Pacghowski (Homeowner)	Jill Wood (Island County Environmental Health)
Phil Cohn (ICPW)	Lori Clark (IC DNR)
Anna Toledo (IC DNR)	

### Introductions

- Meeting opened with introductions of the 10 members present, 5 guests present and 4 guests on webex.

### Update Sedimentation and Hydrology Study

#### 1. CGS has completed the following:

- Collected sediment samples and sediment cores, and may be going back out for additional samples, if needed.
- Conducted survey work to obtain accurate elevations for all sediment core locations to allow for future measurements to be made accurately.
- Discussed the history of the storm damage/flooding with several residents.
- Sent a large number of collected samples at the labs for dating using radiocarbon, lead, and cesium dating and are awaiting another lab for grain size analysis.
- Bathymetric and beach/spit features mapping underway, with some draft maps already prepared. These show a substantial amount of spit elongation over the last 130 plus years and with that elongation of the primary intertidal drainage channel, which is certainly one of the reasons for what appears to be slower or prolonged drainage of the marsh and converted field areas.
- Skillings Connolly has all the water level wells and measurement stations installed, with CGS having surveyed these locations after installation.

CGS is requesting any residents who can provide elevations and survey monuments/ stakes/ spikes with accurately know elevation to verify information.

#### 2. USGS - Sedimentation Study update:

USGS deployed a current meter, CTD and turbidity sensor for the last month and made two rounds of RTk-GPS surveys of landforms (preliminary summary attached). Preliminary data show two potential significant issues:

- 1) Sediment flux toward the marsh and deposition on inner tidal flats will likely be higher during winter wave induced sediment resuspension.

2) Tidal flat aggradation likely to be significant over a longer time period from both wave-driven transports of sands north-northwestward and settling of fines in calmer water up high.

Soon USGS will be able to calculate actual volume of water and mass of sediment that moves with the water levels/velocities we recorded at the deployment site.

3. Jay Lawrence brought in a blow of mosquito larvae. There is a black tarp at the end of the Hobbit Trail that is collecting water and harvesting mosquito larvae.

(UPDATE: The black tarp was laid down by Island County Noxious Weed Program (WSU Extension) and is part of the reed canarygrass control. Island County is working to fix the tarp to allow drainage to prevent water collection.)

4. Barnum Point – East Tract is fully funded. Island County Parks is working on access. It is not open yet.
5. Rob Howie mentioned a conversation with a member of a community on the Kitsap Peninsula who came together and were able to fund and permit dredging of their canals in their marina. He said this was an example of how this method maybe worth looking at for Iverson and that it is possible to get done through the permitting restrictions.

### *Sea Level Rise Project Maps – Ian Miller, University of Washington Sea Grant Coastal Hazards Specialist*

Ian Miller works with communities on how sea level rise interacts with the coastal hazards we already experience. WA Sea Grant bridges the gap between the communities and science.

Probability models for sea level rise and storm surge were created to assess potential restoration/ecosystem recovery projects.

The maps created for Island County are elevation based –and mapped both changes to average sea level and annual extreme water level. Modifications, not reflected by LIDAR data, are not included (engineering solutions for flood control like tide gates or drainage channels may not be included). These maps should be approximate to the FEMA flood maps but exclude the effects of waves on coastal flooding. Looking at patterns of how things react over time.

Extreme events, coastal flooding, high tides, and storm surge are variables which are not incorporated into to the maps. Waves, erosion, groundwater (salt water intrusion), bluff erosion, critical habitat are not factored into these maps.

The March 10<sup>th</sup> event was partially a wave-driven event. Waves were not included on these maps.

Tide gauge data (Cherry Point, Port Townsend, Friday Harbor, Seattle) relative to MHHW were used for annual extreme water level projections integrated into SLR probabilities.

Presentation is available by request and also on the Iverson Improvement Project website:

<https://www.islandcountywa.gov/Health/DNR/Pages/Iverson-Improvement-Project.aspx> .

Discussion after the presentation included the following:

- The sea-level rise model is for an emission-scenario (currently use 4 global climate models) not solely dependent on carbon dioxide. Methane is another. Carbon has a longer lifetime in the atmosphere which is why we focus so much on it.

- Rob Howie asked “What do we do about it?” especially in reference to the hydrology study. Ian responded that there are 3 approaches to adapting for communities: protect, adapt or retreat. These three approaches can be layered.
- Bob P. said that in the Iverson community, water comes in behind the bulkhead and floods the homes. Lori responded that bulkheads protect from erosion, not from water level.
- Dawn shared that this study shows the probability of stronger storms. Sedimentation is changing faster than SLR in this area.
- Nicole suggested that these homeowners can look at this issue as a community, “You have a good start right here”. She suggested that the community could look at the properties together. 15 parcels on the Dungeness River Delta did a collective project to evaluate options as a community.
- Jay Lawrence shared that the County Planning Department would not allow him to raise (with pilings) his cabin. They required a foundation and basement. Nicole responded that this is an example of how the code (unintentionally) may limit you. We need to figure out where these problems are (code limitations) and try to address them.
- Nicole shared the example that in Connecticut residents are lifting their homes to be able stay longer in their homes on the shoreline.
- With IC being present in the Iverson community, we can help bring information to help leverage community conversations to find a community solution. We can offer support over the next year.
- Jay explained how special purpose districts (like diking and drainage districts) can be created to raise money to do projects for the people who are affected. There are RCWs to explain how citizens form this.
- Rob Howie suggested we have a meeting about special purpose districts. Lori and Dawn will find the RCWs and schedule the meeting, but will not be able to lead the meeting since this is not their area of expertise. Rob may be able to lead the meeting.

### *Next Steps & Next Meeting*

#### **Next Meeting:**

~October meeting is canceled.

November 22<sup>nd</sup> 1-3pm, Camano Island Library