How deep are the wells?

Current Conditions (Elevation drawing)

Where is the dike along Point No Point Road?

Groundwater in Feet: Intense rain/King Tide/ Saturation Decreases 1/1-1/19/22

(Transition Slide) Groundwater Measurements Existing Conditions

Possible Future Groundwater

Current Conditions (Elevation drawing)

I can't see where the stability of the enhancement comes from.

Where along Point No Point Road did you test salinity?

Greenbank Project comparison

Lidar detail project view

How high will water go at high tide N of Hillview Lane?

How does storm water move from N residential are to S of levee?

(Transition Slide)

Possible Surface Water Conditions: Jan 7, King Tide

How deep is the water at the W end?

(Transition Slide) Possible Future Conditions

Groundwater in Feet: W End of PNP / Inside Tide Gate following tidal signal 11/21-12/21

Overview

Existing Surface Water Conditions - Jan 7, King Tide

Lidar detail project view

Follow-up Response (Blue Coast Engineering)

FEMA Flood elevation (12'); We will do a zero rise analysis (required by FEMA & County) to show if there would be a change in the FEMA Flood elevation. In general, Puget Sound has infinite storage capacity so on coastal projects the FEMA Flood elevation typically does not change. It's considered a flood zone now and that won't change.
Next Steps

How do you expect substrate in the marsh to change? With the low velocity it seems the marsh & ditches would currently be very fine. The substrate itself is marsh on top and then sand beneath that. We would excavate out channels, and that sand would become exposed. In the places that are currently fresh water marsh that would decay then re-vegetate with salt marsh vegetation. We have seen this happen within as short a time as a year. Stillaguamish River Delta, for example where they have restored parts of the river delta to tidal inundation. Salt Marsh Plants come in quickly. You will still have high marsh and salt marsh plants rather than fresh water plants. As a comparison, Carpenter Creek Estuary in Kingston has a substrate that is quite silty/muddy materials. Different geology than PNP. Here we have sand in the channels and open areas.

Next Steps

A little confused about flow of water. Looks like if there was no road, the water would flow N naturally. The levee looks like it moves water to tide gate area.

Next Steps

It is helpful to see Greenbank comparison for soil structure. Can the side deck include the equivalent structure for the Hansville area?

Next Steps

If we value that, Appleton has a strong conceptual design know-how,きせつ next steps in a drawing, but we can produce a drawing for the upland area as well. We have the licensing in a well at Naval Point, which confirms continuous geology to share as well.

Next Steps

Who gives you the right to make these changes to the land? In the case, the property where the ecology restrictions is proposed in towed by Kitsap County, which means the County will decide whether or not to move the project forward from investigation, analysis, and design (current phase) to construction. Kitsap County will make this decision by evaluating the work that will be done to evaluate the project's impact to the environment and the potential for the project to affect the environment beneficially.

Next Steps

What considerations are there for the displacement of animals that occupy the area?

Next Steps

Why is the opening on the E rather than the N?

Next Steps

What is the source of permanent funding to keep the 150' opening open?

Next Steps

Why is the 150' opening designed based on regression models? It is located for the size of the hospital that is chosen. These are self-sustaining channels. They have barrier spit with "arms" that are designed to protect the tidal channel preventing sand and woody debris from flowing directly into the channel. It would come out on the eastern shoreline, then curve to the N. Turning in that direction would prevent wood from becoming stranded. If you divert surface water and most of the ground water to the E shore, wouldn't the lack of hydraulic pressure be too low for subsurface water to penetrate into the properties N of the levee? Would it be enough to kill new forest?

Next Steps

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Session 1 General Questions (not attached to a specific slide)

What is the length of time for project to finish? It will take 1-2-3-1/2 years to picture & implement construction. In the meantime, is it useful to permanently open the flood gate now?

Session 1 General Questions (not attached to a specific slide)

How will beach erosion on the north side be controlled? And who will be responsible for it? When we do beach enhancement it's a combination of sand and large woody debris and vegetation. We work with a landscape architect to maintain recreational opportunities and have a vegetation plan to stabilize the beach. In terms of erosion, we allow there to be a certain amount of adjustment of a beach, and we do want wave and beach profile changes over time. We over wash in order to allow our beach to adjust. Maintenance plan would be discussed with... Healthy dune without blockage, and sediment supply is good.

Session 1 General Questions (not attached to a specific slide)

Have climate change / Sea Level Rise calculations been considered in the modeling? There are a number of projects that have been done with regard to converting fresh water marsh to salt water. Overall the results show us that there has generally an increase in diversity of animals and birds and plants... species that use those habitats. In Puget Sound we are looking in salt marsh habitat, which is the impetus for this project. We will need to write a biological assessment (NOAA, WDFW, Audubon) and the county would... and the county would be discussed with... Our partners have been with us through the preliminary design phase, and they will be crucial to project success when we move to the permitting phase.

Session 1 General Questions (not attached to a specific slide)

What are considerations for displacement of animals that occupy the area? Are we aware of the existence of the beaver dam, and yes, it could affect the surface water measurements, but the beaver dam was not in place for any of the time periods shown here. A dam would dam up water, we would have less drainage.

Session 1 General Questions (not attached to a specific slide)

Are we going to be in conversation with resource managers, with Audubon, and area biologist from WDFW? Assessing impact and coming up with a plan that minimizes impact is a requirement of permitting. These partners have been with us through the preliminary design phase, and they will be crucial to project success when we move to the permitting phase.

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Why does the beaver dam affect the results of the gauge? We are aware of the existence of the beaver dam, and yes, it could affect the surface water measurements, but the beaver dam was not in place for any of the time periods shown here. A dam would dam up water, we would have less drainage.

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