April 24, 2019

City of Coos Bay Planning Commission Coos Bay City Hall 500 Central Avenue Coos Bay, Oregon 97420

Edward Hughes 1170 Ferguson Ave. Coos Bay, OR 97420

Coos Bay Planning Commission:

I shared comments publicly on March 21, 2019 but want to share a summary of the estuary model data that I spoke of then and the powerpoint presentation (see link below) that informed me of this analysis. This state of the art hydrodynamic model shows that the entire shoreline of the bay will be affected by the proposed dredging project. Water salinity would increase 2 PSU throughout the bay extending well up into the mainstem Coos River (an additional kilometer) and throughout all the main tributaries of the bay including North Slough, Haynes Inlet, Kentuck Creek (proposed mitigation site), Willanch Creek, Catching Slough, Coalbank Slough and South Slough. This salinity increase would accelerate the higher salinity already caused by previous dredging. This change will affect all shoreline environments, exacerbating already compromised systems in the tidal zone. Increased salinities will accelerate corrosion of county infrastructure in the tidal zone that likewise is already compromised. Both marsh and pasture environments will experience rapid ecological shifts and will take time to reset to higher salinity. Although yet to be analyzed, there is little doubt that the proposed dredging will lead to other bay wide changes in water velocity, turbidity and temperature. Rapid and or significant changes to these variables will affect many if not all aquatic flora and fauna including those of subsistence, recreational and commercial value in the bay. Next step for the model are to assess these issues.

The safety issues that this proposed project creates in the bay are great. Coast guard analysis concluded that the current status of the shipping channel is sufficient for the current use. The only reason for this proposed project is to allow extremely large LNG transport vessels squeeze in and out of Coos Bay as fast as possible. The volume and size of the increased traffic claimed to be needed for Jordan Cove LNG plant to function profitably is unsafe and will be disastrous for Coos Bay and our community. Security and safety for all water users and activates will be threatened. Will LNG mega transports use all preferred tidal conditions to navigate the shipping channel? Who gets priority in the jetty in bad weather?

As I stated in public testimony, this proposed project is nothing more than a Trojan Horse for the Jordan Cove project. Why would we sanction these harmful results when the only reason for dredging has not been permitted, has no viable business plan, and has no real mitigation plan? Sanctioning this proposed dredging is a vote to allow the greater boondoggle that is Jordan Cove squeeze as many dollars as they can out of Coos Bay before they go bankrupt when it fails, for any of a thousand possible and likely reasons. I strongly suggest the county not sanction the proposed amendment to the Comprehensive Plan Map to the Coos Bay Estuary Management Plan to 1) change the designation of approximately 3.3 acres from 52-NA to DDNC-DA; 2) change text in the Comprehensive Plan to take a reasons exception to statewide planning goal 16 to authorize the proposed map amendment; 3) an Estuarine and Coastal Shoreline Uses and Activities Permit for "New and Maintenance Dredging" in the DDNC-DA Estuarine Zone; and 4) an Estuarine and Coastal Shoreline Uses and Activities Permit to allow an accessory temporary dredge transport pipeline in the 52-NA, 53-CA, 54-DA and 55-CA Estuarine Zones.

Thank you for the opportunity to share this important information so that you can make a well informed decision that will have wide spread and long term consequences for our environment, our community and our culture.

Link to Estuary Model presentation:

https://app.box.com/s/hxge8aam6ef8g2a140nm0lpbipacqh7t

Sincerely,

Edward Hughes

HEARLEY Henry O

From: Edward Hughes <edhugs@gmail.com>

Sent: April 24, 2019 9:20 AM

To: CALLISTER Jacob (LCOG); HEARLEY Henry O

Subject: Comments on JC proposed dredging to the Coos Bay Planning Commision

Attachments: UO_Coos_bay_hydrodynamic_model_results_summary.docx; Coos County Planning

Comminsion JC Dredging letter 4.24.2019.docx

Gentlemen,

Please find my attached comments with embedded link to the U of O presentation explaining the model results that are also summarized by the additional attached comments from Bass Dye at U of O.

Thank you again for including these in the public record.

Sincerely

-ed

HEARLEY Henry O

From: CALLISTER Jacob (LCOG)
Sent: April 24, 2019 8:59 AM

To: Edward Hughes
Cc: HEARLEY Henry O

Subject: Re: Jordan Cove Energy Project L.P. Comprehensive Plan Map Amendment question

Hello Mr. Hughes,

Thanks for reaching out. Yes please go ahead and send the 'box' link. We'll get it in the record.

I have ccd Henry Hearley who is managing public comments for the application.

Have a good day.

Jacob Callister

> On Apr 24, 2019, at 8:35 AM, Edward Hughes <edhugs@gmail.com> wrote:

>

- > Greetings Mr Callister,
- > I am Ed Hughes from Coos Bay and I spoke with you after the March 21 meeting in Coos Bay about significant information about hydrological effects from the proposed dredging project. I want to share the power point presentation with you but it is quite large. Can I include a 'box' link to the file in my comments so that you can access the presentation without clogging your email? Please advise

>

> Thank you

>

> -ed

HEARLEY Henry O

From: HEARLEY Henry O
Sent: April 24, 2019 9:23 AM

To: Edward Hughes; CALLISTER Jacob (LCOG)

Cc: Carolyn Johnson

Subject: RE: Comments on JC proposed dredging to the Coos Bay Planning Commision

Received. Thank you, Mr. Hughes.

Henry

From: Edward Hughes <edhugs@gmail.com>

Sent: April 24, 2019 9:20 AM

To: CALLISTER Jacob (LCOG) < jcallister@lcog.org>; HEARLEY Henry O < HHEARLEY@Lcog.org>

Subject: Comments on JC proposed dredging to the Coos Bay Planning Commision

Gentlemen,

Please find my attached comments with embedded link to the U of O presentation explaining the model results that are also summarized by the additional attached comments from Bass Dye at U of O.

Thank you again for including these in the public record.

Sincerely

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A hydrodynamic model of the Coos Bay estuary has been developed and validated with a multitude of field measurements to ensure the model can accurately recreate the hydrodynamic processes (e.g., tides, currents, salinity) within the Bay¹. The model was utilized to compare the Bay's present-day condition to the proposed dredging project which will involve deepening and widening the western navigation channel to improve vessel access into the Bay. Each model was run with idealized river discharge scenarios which represented the dominant seasonal shift from low-flow conditions of summer to the storm-driven, higher discharge conditions of winter. Model simulation results indicate that the proposed dredging will have minor impacts on the Bay's tides and currents, however salinities are expected to change, especially during winter season conditions². The mean along-channel salinity is expected to increase ~0.5-3 psu with the proposed dredging², in other words, the range of salinities experienced at a given location within the channel is forecasted to shift towards higher salinities. Additionally, the shift towards higher salinities with the proposed dredging scenario was also modelled to occur within South Slough.

Bass Dye Oceans & Ice Lab University of Oregon Department of Earth Sciences

- 1- Conroy, T. (2018). The dynamics and exchange flow variability of the Coos Estuary. University of Oregon, MSc. Thesis.
- 2- Eidam, E., et al. (2019). Impacts of 150 years of shoreline and bathymetry change in the Coos Estuary, Oregon, USA. Estuaries and Coasts. Submitted.