As we contemplate the revision of this important document, the Coos Bay Estuary Management Plan, it makes sense to revisit some history of the place to give us all some perspective. The charts I have given you were created 72 years apart. As is common with most deep port estuaries, extensive development ensued within the tidelands and the channel since settlement by Europeans. From recent calculations* the Coos Estuary has lost 75-85% of its tide lands. Most of this development has occurred in the time between when these charts were made, the first in 1895 and the second in 1967. Five years after this latest chart was made, the United States enacted the Clean Water Act which spawned the Coastal Zone Management Act, which guides what we currently do here with the CBEMP, and created the Estuarine Research Reserves. South Slough was the first of the reserves to be established.

So, late last century we as citizens and policy-makers decided that covering wetlands, channelizing all parts of estuaries, and deepening and widening channels with no limits wasn't a good thing, for all of us. Balanced efforts between environmental values and commercial endeavors were the talk and goals of documents from Goal 16 to the mission of the Port of Coos Bay. Of course, the balance between development and preservation or restoration from 1972 to present has been of what we have left. Think of these charts as radiographs of someone's lungs after a period of tissue loss from breathing in an unhealthy environment (like coal mining or smoking). Balance questions: Keep mining or smoking? Add back some healthy tissue by abstinence and restorative exercise?

For our estuary, little restoration, or reversing the trend of wetland loss, has taken place. Mitigation is notoriously flawed practice as a "no net loss" strategy of the calculation to keep the other values of estuaries intact and/or enhance these values. What this estuary needs, what we need to grow food, have clean water, and check floods and even add to the ability to sequester carbon, is restoration of the values of this place.

What are estuarine values?

- Fish habitat rearing sites and nurseries
- Sediment trapping/nutrient storage (every tidal cycle brings in both fresh and s.w. sediments)
- Filtering capacity for pollutants and toxins
- Flood protection (more relevant with sea level rise)
- Migrating wildlife feeding stops
- Carbon sequestration (blue carbon of tidal marshes surpass mature forests per acre)
- Cultural/tribal attributes (much of ancestral lands now covered by fill)
- Transportation/shipping
- Recreation

It has been suggested that the term industry could be shifted to include the enhancement of these other values, which would benefit those who already have jobs in them. Think of fishing. An analysis of U.S. recreational landings indicates that for 2000-2004 estuarine species comprised approximately 80% of the fish harvested nationwide. https://spo.nmfs.noaa.gov/sites/default/files/TM90.pdf
Restoring the areas most easily "reclaimed," could actually positively affect the shipping value by reducing siltation and thus reduce the need to dredge as frequently. U of O and South Slough's recent study of Improved Understanding of Sediment Dynamics for the Coos Estuary should be incorporated into the long-term planning for "industry" in our estuary. https://nerrssciencecollaborative.org/project/Sutherland16
To sum up, we have started late in the game as regards to stewardship. The estuary is damaged in its ability to perform its ecological services. We need to shift our industry to enhance the other values which already support us with food, clean water, enjoyment. This means not removing more wetlands.

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*Brophy et.al.



