2023 NCRF Grant Summary of Results

The City of Edmonds and the Edmonds Marsh Estuary Advocates (EMEA) are pleased to announce completion of preliminary evaluations supporting restoration of the Edmonds Marsh estuary. This work was funded by the National Coastal Resiliency Fund (NCRF), a program managed by the National Fish and Wildlife Foundation and NOAA.

Elements considered for restoring the Edmonds Marsh to a fully functioning estuary include two major components. One is reconnecting the Marsh with Puget Sound through an open channel that allows passage of salmon and other aquatic animals. The other element is expanding estuary habitat by partial removal of fill from the adjacent Unocal site.

Significant issues regarding the feasibility of these restoration elements were addressed by the grant. The grant deliverables presented in three reports are:

- Marsh hydraulics and flood impacts to the developed portion of the Edmonds waterfront;
- The risks future landowners of the Unocal parcel will have if site contamination remains;
- The process options the Edmonds community has in proceeding with the next steps leading to a restored Marsh.

In addition, a public engagement effort continued throughout the term of the grant.

Summaries of the Four Project Elements:

Hydraulic Analysis Report

Background:

High tides, sea level rise, and freshwater flow from storms combine to form conditions that will flood the Edmonds Waterfront with increasing frequency, regardless of whether the Marsh is reconnected to the Sound or not. That flooding will occur sooner if the proposed reconnection includes full flow passage into the Marsh and if steps are not taken to separate Marsh water from the rest of the waterfront.

What was done:

A hydraulic model of the Marsh was completed, building on and updating past work. The model was refined to match known existing conditions including the flood event of December 2022. It was then used to evaluate future conditions that would result from: opening the Marsh to full tidal flow, excavating soil from the Unocal site, diverting SR104 stormwater into the Marsh, sea level rise, and large rainfall events.

What was confirmed and learned:

The model demonstrates the risk that the Edmonds waterfront is under now and how that risk will increase as sea levels rise in conjunction with stormwater flooding.

If full flow conditions to and from the Sound are restored, the tidal water levels in the Marsh will be higher than they are now and freshwater flood flow will drain out of the Marsh more quickly.

Extension of the existing north walkway between Harbor Square and the Marsh to adjacent areas at lower elevations would prevent higher water levels in the Marsh from adding to flood conditions in the developed portion of the Edmonds Waterfront. Sea level rise combined with floods and high tides will impact Shellabarger Marsh.

Excavation of the Unocal site would not lower freshwater flood elevations significantly if the full opening alternative is selected. This is not the case for alternatives that open the Sound flow connection with tidal restrictors.

Flow under the railroad bridges would be somewhat restricted by the narrow passage there.

Adding all the SR104 stormwater flow to the Marsh would not significantly increase flood elevations under the full opening alternative but flood flows of over 300 cfs would create erosion hazards. If flow is restricted in the Sound connection channel, flood elevations would increase as a result of SR104 stormwater if the estuary is not expanded.

Contamination Impacts Analysis Report

Background:

The ongoing 18-year cleanup of the Unocal site has effectively removed most of the contamination from the site except for multiple small areas and one large area that currently do not meet clean up levels, as indicated by earlier collected soil samples. Areas with remaining contamination are proposed by Chevron (owners of the Unocal parcel) to be managed under environmental covenants. Reconnection of the Marsh to Puget Sound and expanding the estuary requires excavation on the Unocal site that would likely encounter areas that do not meet soil cleanup standards.

What was done:

Existing Unocal cleanup documents were reviewed and summarized. The current cleanup status, the expected environmental covenant restrictions, and the implications resulting from remaining contamination on restoration alternatives were detailed.

A list of potential mitigation options intended to manage contamination risk was developed.

An attorney specializing in Washington State Model Toxic Control Act issues was hired to analyze potential environmental liability to future landowners resulting from excavating contaminated soil and to evaluate ways to limit that liability.

What was learned:

Excavation poses the risk of exposing and spreading soil and groundwater contamination. This could result in the requirement for supplemental cleanup actions (focused on soil removal and/or isolation) coordinated with Ecology. Where this excavation encounters known areas of contamination, future landowners would be held responsible. Where unknown contamination is encountered, Chevron would be responsible for cleanup.

Excavation below the Ordinary High Water level would require compliance with Ecology's Sediment Management Standards which may be more restrictive than the currently established cleanup levels at the Unocal site.

Ownership contamination risk can be managed through regulatory coordination, engineering measures, and temporary mitigation. Avoidance of contaminated areas is the simplest and most cost effective measure. Excavation, engineered caps, liners, cut-off walls, and in-place treatments are options in contaminated areas.

As part of regulatory coordination, elements of the restoration plan could be incorporated into the contingency plans and environmental covenants required under the final cleanup action plan.

It is recommended that a Consent Decree be negotiated with Ecology to address restoration implementation, minimizing liability exposure for future landowners. A Prospective Purchaser Consent Decree with Ecology would provide the same protection as a Consent Decree but could be finalized prior to purchase.

Planning and Community Engagement Report

Background:

The goals of Marsh restoration include reducing community flood risk, supporting the Puget Sound food web, adding local recreational opportunities, and creating habitat for salmon and other wildlife. A process for developing a plan that meets these goals requires developing and conducting a public planning process.

What was done:

The planning and public outreach activities completed during the grant period of performance were summarized. A list and discussion of anticipated environmental approvals was presented. A plan for future public engagement as the project advances through the next phases of design was developed.

Seven potential engagement formats were proposed and a number of tribes, stakeholders, public groups, and advocates that could be targeted during the planning process were listed.

A comprehensive Marsh watershed planning discussion, links to the large number of existing Marsh studies, examples of similar restoration projects, the next NFWF grant proposal, and a list of potential land purchase and construction funding sources are also part of the report.

What was learned:
There are 5 local, 2 state, and 4 environmental approval processes that may be triggered by elements of the restoration. The report lists the process, the managing agency, the permit trigger, and relevant notes to inform future project development for each.

Moving forward, an outreach process that leads toward selection of a community developed restoration alternative will be a primary goal. Four steps are proposed: formalize a public engagement plan; communicate project status and schedule to stakeholders, tribes, and the public; develop restoration alternatives; and select a final community preferred alternative.

Public Outreach and Engagement Element

Background:
The public outreach effort focused on providing information on the purpose and progress of the grant and on encouraging support for restoration of the Marsh Estuary.

What was done:
The EMEA gave presentations to interested citizens and to multiple local groups. The outreach effort included multiple meetings with public officials: City of Edmonds (City) council members and the mayor, Port of Edmonds commissioners and the Executive Director, City staff, and a state senator. The EMEA engaged the community through its website, periodic news letters to members, tee shirts, bookmark, booths at the Saturday Market and multiple public events, and numerous newspaper articles.

Blue Coast Engineering made two grant report finding public open house presentations in Edmonds in March, 2025 and in May, 2025. Ecology has given well attended in-person and video conference presentations about the status of the clean-up of the Unocal site.

What was learned:
The Edmonds community is well informed about all aspects of Marsh restoration. There is strong and widespread support for reconnecting the Marsh to Puget Sound, for implementing coastal resiliency into the restoration design, and for utilizing the Unocal site for fish and wildlife habitat.