

2023-2025 Draft Budget Development Worksheet

Work Element

Erosion Management

Summary of 2023-2025 Work

Erosion along rivers and streams imperils houses, infrastructure, agricultural land, and other valuable property across the Chehalis Basin. Some erosion is natural, but modified landscapes and climate change have accelerated erosion in many places. This program reduces erosion risk in targeted areas with habitat-friendly stabilization projects. It compliments that work with a suite of supporting actions to improve our understanding of erosion in the basin and our ability to address it before it causes harm.

Description of Needs

The Erosion Management program is integrated in that it both reduces flood damages and improves aquatic species habitat by implementing bioengineering stabilization projects at locations with active erosion.

Depending on the funding level, the program will deliver between 3 and 12 on-the-ground projects and advances tools to more proactively manage erosion over the long-term. The Lewis and Grays Harbor Conservation Districts have multiple potential erosion projects queued up with no current funding source, and new projects are identified every year as meandering watercourses venture close to public and private infrastructure.

Without this program, some property owners will lose economically productive land, buildings, or homes. They may also pay for expensive emergency projects, which often consist mostly or exclusively of rock bank protection and are sometimes unpermitted, both of which are damaging to aquatic habitat.

List of Key Tasks & Assumptions

The key assumption is that the Erosion Management workgroup will complete a framework for the program by the end of 2022 or early 2023. The workgroup has tackled a number of difficult and complex topics; OCB expects they will meet that deadline.

Key tasks include the following:

- **Urgent Projects.** These are smaller-scale projects where significant damage is anticipated in the current high-water season. Stabilization of a local area is the primary focus of these projects.
- **Imminent Projects.** These are smaller-scale projects where significant damage is anticipated within the next two years. Stabilization of a local area is the primary focus of these projects, although may sometimes include 2 or more adjacent landowners.
- **Reach-Scale Projects.** These are larger projects with less immediate threats. Coordinating a habitat-friendly intervention among multiple landowners is the primary focus of these projects.
- **Supporting Activity.** The workgroup has identified a list of additional activities that would expand our understanding of, and ability to respond to, erosion throughout the Basin. These include a handbook of erosion best practices; channel migration zone (CMZ) analyses; erosion

risk mapping (like CMZ analysis, but less detailed and more focused); reviewing habitat benefits of log jacks; mapping locations of existing riprap; monitoring the effectiveness of bioengineering techniques; developing temporary stabilization techniques, and expediting cultural resource review work.

- **Programmatic Costs.** Ross Strategic and Anchor QEA would continue to support OCB staff in this work with tracking projects, writing reports, and other administrative and managerial functions. Additionally, a project review team would be available to review potential projects against established criteria.

OCB anticipates that local jurisdictions, particularly but not necessarily exclusively Conservation Districts, will bring urgent, imminent, and reach-scale projects to the program for funding, and will manage them through construction after funding has been awarded. OCB will apply criteria to rank and choose which projects to fund.

All tasks in the Erosion Management program should be considered Integrated. Only bioengineering stabilization techniques will be funded, ensuring projects both protect infrastructure from high water and provide aquatic habitat benefits.

Preliminary Cost Estimates

	Low (\$)	Mid (\$)	High (\$)
Urgent Projects	300,000	850,000	1,450,000
Reach-Scale Projects	500,000	1,000,000	1,750,000
Supporting Analysis	25,000	145,000	415,000
Programmatic Costs	70,000	120,000	185,000
Total	895,000	2,115,000	3,800,000

At the low range of funding, the program could support 2 urgent projects, 1 smaller reach-scale project, and the erosion handbook supporting activity.

At the mid range of funding, the program could support 5 urgent projects, 2 smaller reach-scale projects, and the erosion handbook plus about three additional supporting analyses.

At the high range of funding, the program could support 9 urgent projects, 2 smaller reach-scale projects, one larger reach-scale project, and the erosion handbook plus about eight additional supporting analyses.

These estimates are very broad, but the urgent project costs are based on the 21-23 erosion management pilot projects, so have a strong basis in actual expenditures. Overhead for the program is included in the total dollar amounts for the low, mid, and high estimates, but OCB staff time is accounted for separately in the Core OCB budget.

We do not anticipate any significant reappropriation for this program.

Prioritization

The low, mid, and high scenarios presented above already account for prioritization of work elements. The Erosion Management workgroup identified a need to balance funding between urgent and reach-

scale projects, to keep urgent needs from using all the available funds. The low estimate represents the minimum amount necessary to accomplish that. The mid and high estimates retain the balance of funding between urgent and reach-scale projects, while increasing overall funding and implementing more supporting analysis.

Beyond the erosion handbook, none of the supporting analyses are necessary to implement the program, though they are all valuable. OCB would look to the Erosion Management workgroup to help prioritize which analyses to fund absent full funding, unless the Board gave specific direction.

Contact Information

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