Office of Chehalis Basin
Reducing flood damage and restoring aquatic life.

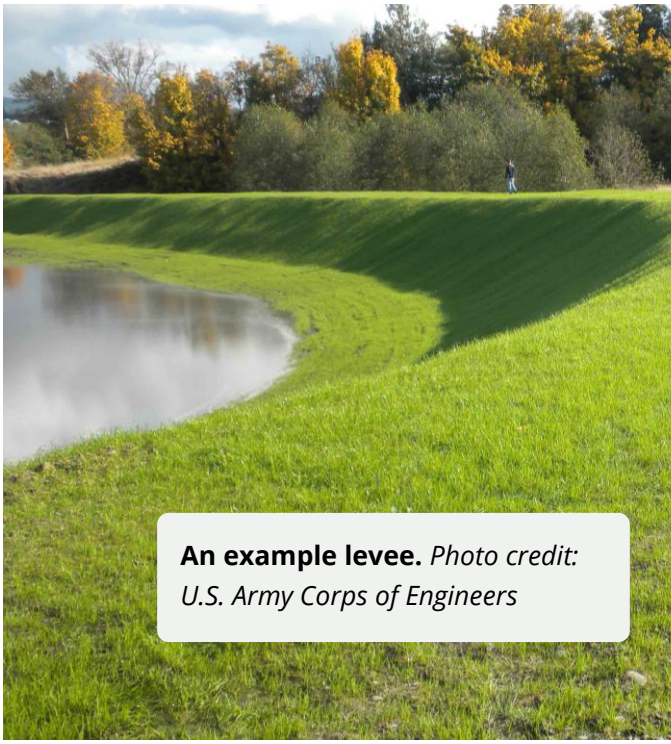
The Proposed Levee System

Also known as the Local Actions Non-Dam (LAND) Alternative

About the proposed project

The Local Actions Non-Dam (LAND) Alternative is a proposed system of new and expanded levees, floodwalls, and drainage improvements primarily in and around Centralia and Chehalis that is intended to reduce flood-related damage in the upper Chehalis River Basin. This alternative is still in its early (approx. 10%) design phase.

As part of its deliberations on the long-term Chehalis Basin Strategy, the Chehalis Basin Board is evaluating whether LAND could be a possible alternative to the proposed Chehalis River flow-through dam for flood control near Pe Ell, or if some segments could be built in combination with the proposed flow-through dam to provide the greatest level of flood protection.



An example levee. *Photo credit: U.S. Army Corps of Engineers*

Potential benefits

If fully constructed, these proposed flood protection structures would:

- Protect over 2,000 homes and businesses
- Maintain and enhance emergency routes and road bypasses during floods
- Create a new recreational trail system that improve access to the river and that could connect to existing and proposed park systems
- Lower flood insurance premiums for landowners

Additionally, LAND is designed to have no or negligible impacts to downstream communities and to preserve aquatic habitat by providing room for the river to follow its natural processes.

Just like with the proposed flow-through dam, it won't be possible to protect all homes and businesses with these interventions, however the recommended long-term Chehalis Basin Strategy will include support from the Office of Chehalis Basin to floodproof, elevate, or relocate any structures that would still experience some flooding.

Preliminary concept design

While general areas for the proposed LAND flood protection structures have been identified (shown in the included map), **it is still too early in design to know where the exact alignments would be;** the final alignments could be different based on future analysis**.** If the Chehalis Basin Board recommends the proposed system (all segments or a subset of them) be built, input from local cities, partners, and community members, as well as further technical studies, will help refine alignment location.

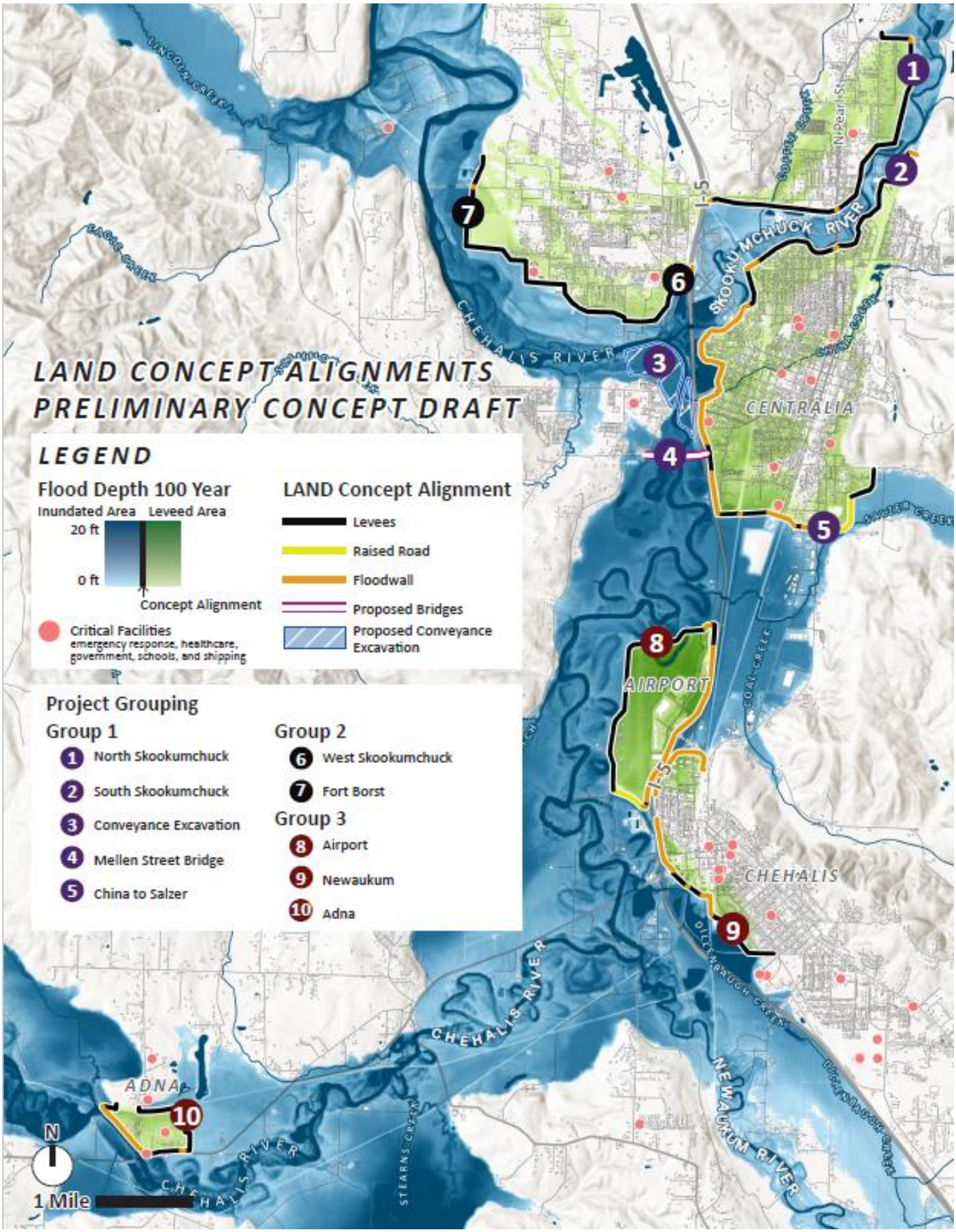
Proposed groupings

One of the goals of LAND is to develop a flood protection alternative that could be implemented fully or partially, at once or incrementally over time. To provide options for how the project could be divided, the design team developed groupings of the proposed levees (see the table and map).

In addition to levees and floodwalls, Group 1 includes excavation of approximately 800,000 cubic yards of material to improve flow in the Chehalis River (3), and removal and replacement of the Mellen Street Bridge (4), which currently restricts flow upstream during flood events.

As part of the long-term strategy development process**, the Chehalis Basin Board is considering all, some, and no segments of the proposed project** alongside other flood protection measures including the proposed Chehalis River flow-through dam for flood control.

Group 1:	(1) North Skookumchuck (2) South Skookumchuck (3) Improved Chehalis River Conveyance (4) Mellen Street Bridge Replacement (5) China Creek to Salzer Creek
Group 2:	(6) West Skookumchuck (7) Fort Borst
Group 3:	(8) Airport (9) Newaukum (10) Adna


LAND CONCEPT ALIGNMENTS
PRELIMINARY CONCEPT DRAFT
LEGEND
Flood Depth 100 Year
Inundated Area
Leveed Area
20 ft
0 ft
Concept Alignment
Critical Facilities
emergency response, healthcare, government, schools, and shipping
LAND Concept Alignment
Levees
Raised Road
Floodwall
Proposed Bridges
Proposed Conveyance Excavation
Project Grouping
Group 1
1 North Skookumchuck
2 South Skookumchuck
3 Conveyance Excavation
4 Mellen Street Bridge
5 China to Salzer
Group 2
6 West Skookumchuck
7 Fort Borst
Group 3
8 Airport
9 Newaukum
10 Adna
CHEHALIS RIVER
SKOOKUMCHUCK RIVER
NEWAUKUM RIVER
CENTRALIA
CHEHALIS
AIRPORT
ADNA
I-5
N
1 Mile

An example floodwall in Mt. Vernon, WA on the Skagit River. *Photo credit: The Seattle Times*

Preliminary cost estimate

Based on the current design, technical experts estimate that the project could cost $900 million - $1.6 billion. This preliminary cost estimate factors in permitting and construction of the levees, reconstruction of the Mellen Street Bridge, and floodproofing, raising, or relocating of homes or businesses in the area that would still experience some flooding. For context, damage and disruption from the 2007 flood is estimated to have cost $900 million.

Next steps

Through 2025, the proposed project will be evaluated by technical experts for costs, benefits, and tradeoffs. In 2026, the Chehalis Basin Board will determine if all or part of the proposed system will be part of their recommended long-term Chehalis Basin Strategy. If the Board recommends any of the proposed LAND features, several more steps would need to be completed before anything could be built, such as:

- Additional technical studies to advance design and narrow down cost estimates
- Community engagement to refine location of flood protection structures and determine feasibility
- Identification of project sponsor (e.g., local government or special district) and funding sources
- Environmental review and permitting

For more information

Learn more at https://officeofchehalisbasin.com/LAND
Questions? Email info@officeofchehalisbasin.com