

MEMORANDUM

Date: July 6, 2022
To: Chehalis Basin LAND Steering Group
From: MIG, Inc.
cc: Office of the Chehalis Basin
Re: **Draft** LAND Elements

On June 27, 2022, the Project Team presented a series of LAND Framework elements derived from the May 2022 Values Planning Workshop. These elements are being used to guide development and analysis for the LAND Alternative and will continue to be refined with LAND Steering Group input, community surveys, and stakeholder input.

A. Flood Safe Structures

- A.1 Develop a prioritization strategy by flood event and/or location
- A.2 Implement a continuum approach for addressing residential and commercial flood impacts.
 - Level 1: Flood Insurance
 - Level 2: Utility Relocation
 - Level 3: Flood Proofing (Both wet and dry)
 - Level 4: Structure Elevation
 - Level 5: Buy-Out and Relocation
 - Level 5a: Acquisition/Demolition (Buy-Out)
 - Level 5b: Acquisition/Demolition & Relocation (buy-out & relocation assistance)
- A.3 Establish a voluntary relocation program at replacement value
- A.4 Identify ways to provide lower income residents relocation options

B. Infrastructure Protection and Resiliency

- B.1 Identify alternative routes to maintain access to critical facilities during catastrophic flood events
 - Improve road network to access emergency services
 - Identify evacuation routes and prepare with a stockpile of supplies
 - Pre-position evacuation vehicles - boats, trains, trucks, etc.
- B.2 Explore infrastructure options that provide multiple benefits
 - Floodplain connectivity and storage

- Surface and subsurface diversions
- B.3 Evaluate green stormwater retrofits in urban areas
- B.4 Place levees/walls at strategic locations to protect structures and major transportation routes (railroads, I-5, Highway 12, 6, etc.).
- B.5 Use technology to better manage flood flows in real time
- B.6 Upgrade warning systems and expand automatic forecast and alarm system and upgrade
- B.7 Develop infrastructure to support future development

C. Floodplain Restoration

- C.1 Integrate natural habitat functions where appropriate
 - Surface diversions that serve multiple benefits (recreation, habitat, agriculture)
 - Integrate ASRP projects
 - Connect outdoor recreation and ecosystem functions
- C.2 Increase distributed flood storage capacity across the upper and lower elevations, where feasible.
- C.3 Implement channel restoration and partnerships with adjacent landowners to increase flood storage and improve habitat

D. Community and Economic Development

- D.1. Focus development at higher elevations. For vacant areas, diversity allowed uses to include varied housing options
- D.2 Identify potential receiving areas within and outside of UGAs
 - Consider mixed-use development (vertical and horizontal) within receiving areas
- D.3 Study site specific floodable open space that stimulates economic development, e.g., floodable parks, expanded trail system (bicycle, pedestrian, equestrian), etc. to increase flood storage

E. Agriculture and Forestry

- E.1 Align forestry practices with river management best practices
- E.2 Identify livestock evacuation routes
- E.3 Create cooperative agreements for short-term livestock management

- E.4 Pre-position livestock transport vehicles for emergencies
- E.5 Protect and maintain agricultural land through transfer of development rights and conservation easements

F. Community Education

- F.1 Increase flood awareness and expand flood readiness programs.
- F.2 Implement a communications plan, reaching community members in multiple languages.
- F.3 Conduct periodic community surveys to gauge public opinion and awareness.
- F.4 Create educational opportunities that incorporate river restoration, cultural and ecological knowledge. Notes: Include figure notes below the graphic.