Appendix D:
General adaptation approaches for Baker Bay

1. Local resilience principles

During Workshop 1, participants placed sticky notes on maps to locate memories, concerns (non-hazards), and important assets. These were summarized along with the information gleaned from the Message Box Worksheets (Figure B.6) to create an overview of themes related to values and priorities, referred to as “Local Resilience Principles”.

These Local Resilience Principles were presented to Workshop 2 participants and participants were given the opportunity to add any values or priorities that might have been missed in Workshop 1. Results from this activity are listed below in Figure D.1 and Table D.1.

Participants also identified which principles were most applicable to each focus area of Baker Bay, and the resulting resilience projects. These are described further in Appendix E. These principles guided the project team as they scoped resilience project concepts shared during Workshop 3, and also assisted the project team to support specific projects. The project team believes that Baker Bay projects will be most successful and beneficial to the local community if they incorporate these principles, and in turn will support local social and ecological resilience.

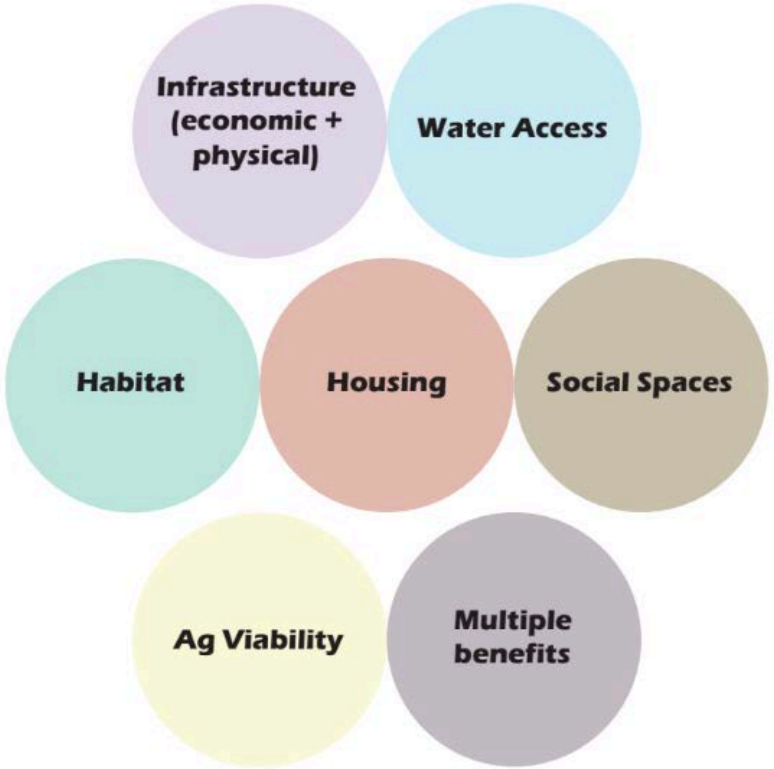

Figure D.1. Local resilience principles identified in workshops 1 and 2 for Baker Bay.

Table D.1. Local resilience principles related to coastal flooding identified by participants in workshops 1 and 2 (see Appendix B for methods).

Category	Asset		
Infrastructure	-Chinook hatchery -Seafood processing -Ports -Public utilities -Water supply	-Emergency access/evacuation -Town core -Hospital -Tide gates -Truck traffic	-Wastewater treatment -Septic Systems -Highway 101 -Cold storage
Agriculture Viability	-Economic asset -Historic character	-Pastureland/Hay -Land management	-Livestock
Housing	-High tide flooding -Available space	-Homelessness	-Affordability (including insurance)
Social Spaces	-Sunset viewing -Parks (Chinook County Parks) -Fort Columbia events -Participatory restoration projects -Schools and student routes	-Storage for emergency supplies -Access to educational resources -Church -Store -Post office	-Community center -Town core -Beaches -Fire Station -Informational kiosk
Habitat	-Coastal prairie -Marsh -Nesting area -Fish passage -Giles woods	-Waterbirds (Geese, Wood Duck) -Salmon -Northern Alligator Lizard -Elk -Checkered Mallow	-Wildlife (general) -Shorebirds (California Condors historically present) -Bear -Frogs
Water Access	-River swimming -Kayaking -Canoeing -Fishing (and kids fishing spots) -Crabbing	-Marine fuel -Recreational and commercial fishing access -Beaches -Paddleboarding	-Duck hunting -Clamming -Boat ramps -Boating
Other (Multiple Benefits)	-Dredge soil placement	-Nature-based approaches	

2.“And-But-So” activity results

During Workshop 2, participants filled out “And-But-So” worksheets for each focus area. The And-But-So worksheet is a facilitation tool that allows complex topics to be tied together with both larger issues and suggested next steps. An example of the And-But-So worksheet is provided in Fig. B.12. Groups were encouraged to write 2-3 And-But-So worksheets for their subregion.

Following this activity, workshop participants were brought back together for a full-group discussion to share their And-But-So worksheets. Each participant was then given three stickers. All And-But-So worksheets were displayed on tables around the edge of the room and participants were encouraged to walk around, read each worksheet and use the stickers to vote on the top three worksheets they felt represented the most relevant and sustainable topics for the project. The goal of this activity was to gain insights of the workshop participant priorities regarding flood-related concerns and potential community-supported actions. These results are described in Table D.2 and were used to inform the resilience projects described in Appendix E.

Table D.2. Top 9 adaptation priorities identified by Workshop 2 participants using the And-But-So worksheets for Baker Bay.

Region	Statement	And	But	So	Votes
Chinook River at Houtchen St.	The changing of the river flooding at the hatchery turns it into a swamp	it's affecting salmon runs/returns	downstream storage of water is a hurdle, [this could] move [the] problem downriver	a detention pond could be built. But where would it go? Basin planning needed	8
Chinook River at Houtchen St.	The road experiences periodic flooding	is an evacuation route	it is kind of acting like a dike - protecting some areas and probably not others	how do we protect the road [and] improve conveyance under the road?	5
Lower Chinook River	South Chinook River is getting flooded	it will get worse with SLR and more intense storms, and "managed retreat" could be a way to move landowners out	people have a strong attachment to land and way of living, and want to stay	could we purchase (timber) slopes immediately upland and help landowners relocate to higher ground but keep them in the same area they can remain?	9
Chinook Shoreline	The pile dikes are falling apart (for Chinook, it's pile dikes #5 and #7)	The resulting increased currents are eroding the entire Chinook shoreline. It affects private property owners, the County park and the Port of Chinook.	It hasn't been maintained by the Army Corps of Engineers	Is dredge material from the channel and disposal into the ocean the right disposal method? Or should that material be disposed in the marginal areas [of] Baker Bay [such as the] Chinook shoreline? Is the Army Corps seeing the dredge disposal process/impacts correctly?	8
Chinook Shoreline	There are existing private riprap/revetment[s]	there are probably more homeowners that may	regulations may not allow this?	Hybrid armoring may be allowed or there may be new	5

		want to do the same		science/developments (cobble etc.) that might work. We need a group planning and funding process.	
Ilwaco	[We need] long term protection of low-lying areas	levees and tide gates aren't helping much	we also need access to the highway	we need new protection solutions - maybe look for other solutions	9
Wallacut River	[We need] long term protection of low-lying areas	levees and tidegates aren't helping much	we also need access to the highway	we need new protection solutions - maybe look for other solutions	9
Wallacut River	Protect infrastructure and populations of Ilwaco	to mitigated increased flooding to [the] Wallacut area		need increases in diking and levees to hold water back but focus on highway access is so important so do both! Raise up AND dike.	6
Wallacut River	[We need] long-term protection - levees and tidegates		Tidegates won't hold back water above its elevation [??]	Look at solutions that have been applied in other nations - Netherlands, Finland, etc.	2