

Kitsap Natural Resources Asset Management Program

Core Team Workshop 4

October 24, 2024, 1:30-3:30 pm



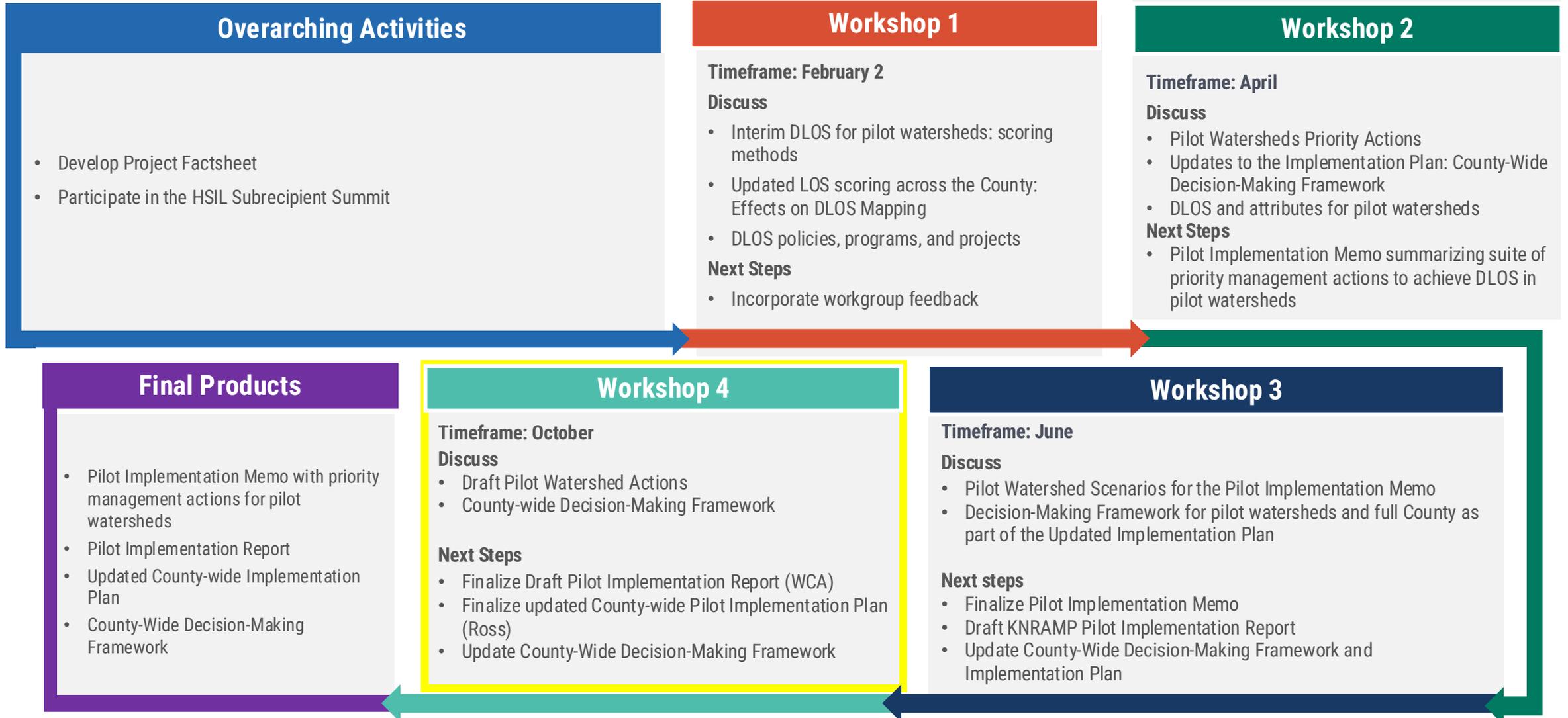
Welcome – Agenda & Goals

Goals:

- Provide an update on the pilot watersheds actions and discuss next steps including partner connections.
- Review and provide feedback on the draft KNRAMP County-Wide Decision-Making Process steps and draft evaluation factors that are meant to establish an ongoing process to identify future geographies and actions for KNRAMP to focus on and provide KNRAMP information in a format that other County departments and partners can use.

Time	Agenda Item
1:00 PM	Welcome and Introductions – Ross Strategic
1:40 PM	Pilot Watershed Actions: Updates and Next Steps – WCAEF
2:20 PM	Break
2:25 PM	County-Wide Decision-Making Framework: Steps & Evaluation Consideration – Ross Strategic
3:15 PM	Updates from Partners <ul style="list-style-type: none">• Suquamish Tribe• Port Gamble S'Klallam Tribe• Kitsap County
3:30 PM	Adjourn

2024 Milestones

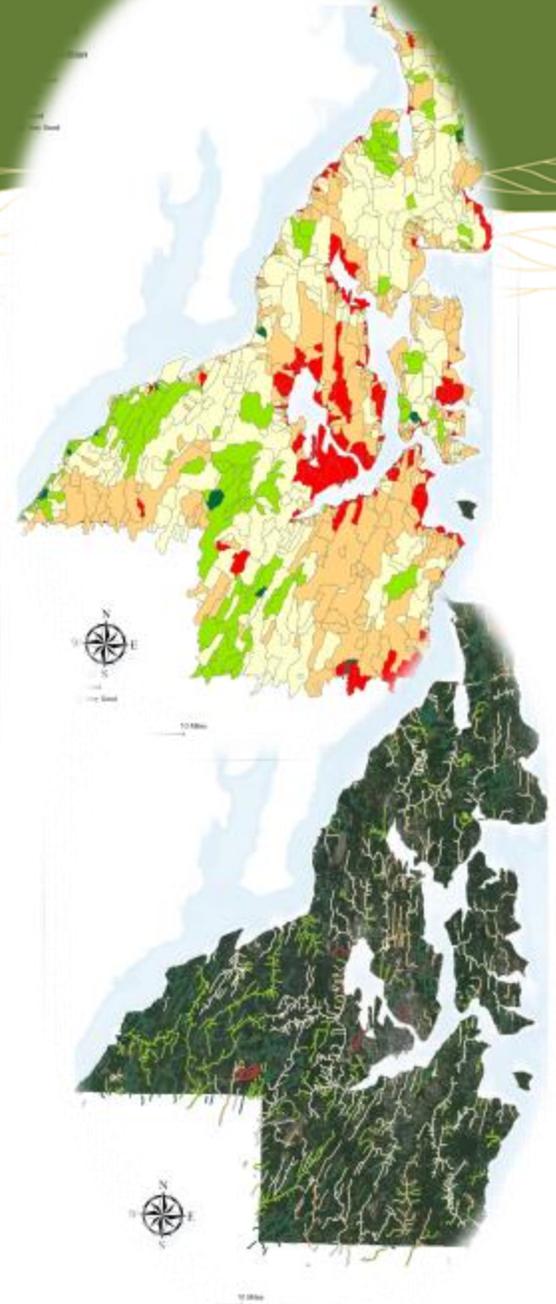
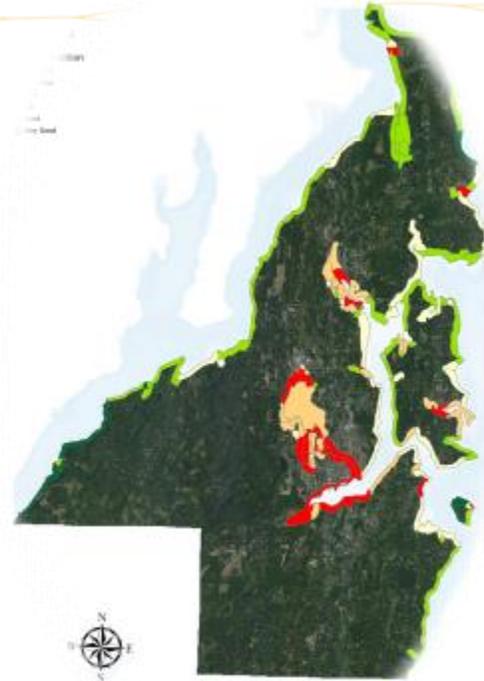


KNRAMP October Core Team Workshop

Pilot Watershed
Implementation Update



WASHINGTON
CONSERVATION
ACTION
EDUCATION FUND



Overview of continued work on identified scenarios to improve LOS toward DLOS in pilot watersheds



Forests in Big Beef Creek

Forests in Chico Creek

Shorelines in Big Beef Creek

Shorelines in Chico Creek

Next Steps

Forests in Big Beef Creek

- July 2024 conditions assessment

BB Creek Watershed	Aggregate LOS	DLOS	LOS Gap
	54.26	60	5.74



July 2024 feedback:

Table A9. Scenarios proposed to the Core Team for forests in Big Beef Creek.

SCEN	WHAT	COST	WHO	LOS Improvement
9	Increase forest cover by planting 1054 acres of upland forest	\$21,084,678	DNR, WDFW, GPC, other land trusts, private landowners	+6.36
10	Improve mature forest % by acquiring 1491 acres of land for protection	\$8,943,107	DNR, GPC and other land trusts...	+6.84
11	Scenario 9 and 10 full actions	\$30,027,785	DNR, WDFW, GPC and other land trusts	+13.58
12	Increase forest % by planting 549 acres, and increase mature forest % by acquiring 672 acres of land for protection	\$15,012,000	KCD, DNR, WDFW, GPC and other land trusts	+6.22

Big Beef Creek Forests Map

Unit	LOS	DLOS	LOS Gap
F_398	53.55	66.85	13.31

Forest LOS score based on weighted average of MUs in the Watershed

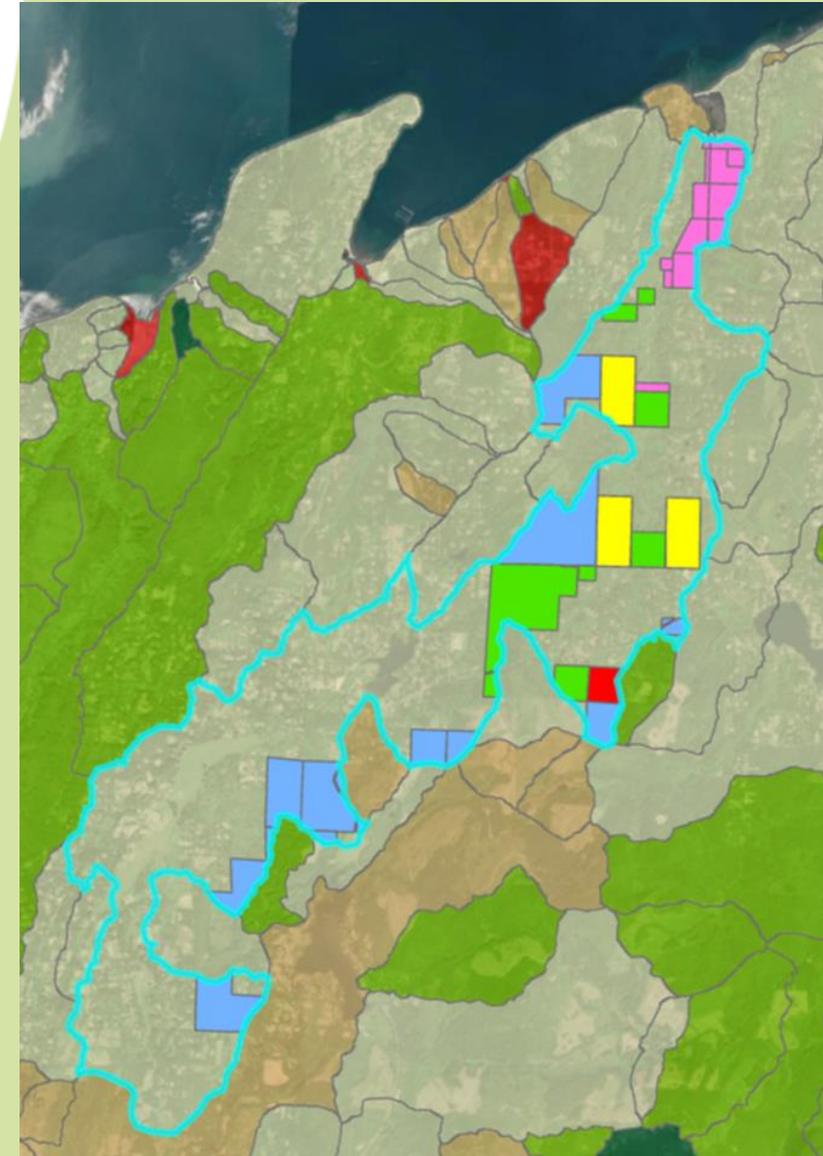
For big Beef Creek to reach 60 weighted average this MU (right F_398) needs to reach LOS of 66.85.

Current LOS is 53.55

Goal is to improve this MU by 13.31

F_398

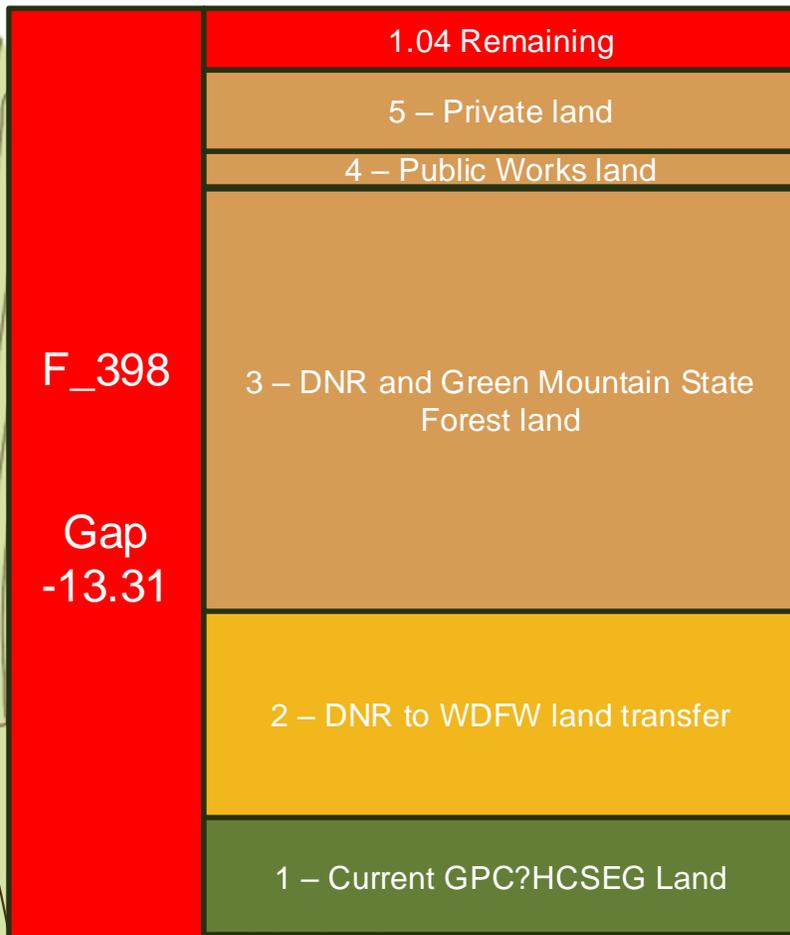
Gap
-13.31



- GPC and HCSEG
- DNR to WDFW Land Transfer
- Adjacent DNR and Green Mt State Forest
- Public Works
- Private parcels

Forest Actions in Big Beef Creek

- Any other actions currently under way?
- Identifying any roadblocks?
- What workarounds can we identify for any roadblocks?



Action	Change in F1 forest cover	Change in F2 mature	Change in LOS	Status
1 - Current GPC/HCSEG land	13.37 acres	135.43 acres	+1.21	Protected
2 - DNR to WDFW land Transfer	98.78 acres	207.52	+2.8	Transfer in progress
3 - Adjacent DNR and Green Mt State Forest land	178.77 acres	546.17 acres	+6.32	Not yet started
4 - Public Works land	0.02 acres	28.77 acres	+0.24	Not yet started
5 - Private land	16.11 acres	195.74 acres	+1.7	Not yet started
Total	307.05 acres	1,113.63 acres	+12.27	

Forests in Chico Creek

- July 2024 conditions assessment

Chico Creek Watershed	Aggregate LOS	DLOS	LOS Gap
	50.06	60	9.94



July 2024 feedback:

Table A9. Scenarios proposed to the Core Team for forests in Chico Creek.

SCEN	WHAT	COST	WHO	LOS improvement
8	Increase forest cover by planting 494 acres of upland forest	\$9,879,035	City of Bremerton, DNR, KCD...	+10.57
9	Improve mature forest % by acquiring 2615 acres of land for protection	\$15,691,145	DNR, GPC, other land trusts...	+9.99
10	Scenario 8 and 9 full actions	\$25,570,180	City of Bremerton, DNR, KCD, GPC and other land trusts	+20.56
11	Increase forest % by planting 367 acres, and increase mature forest % by acquiring 181 acres of land for protection	\$8,426,000	City and County Parks, DNR, GPC and other land trusts, KCD	+10.34

Chico Creek Map

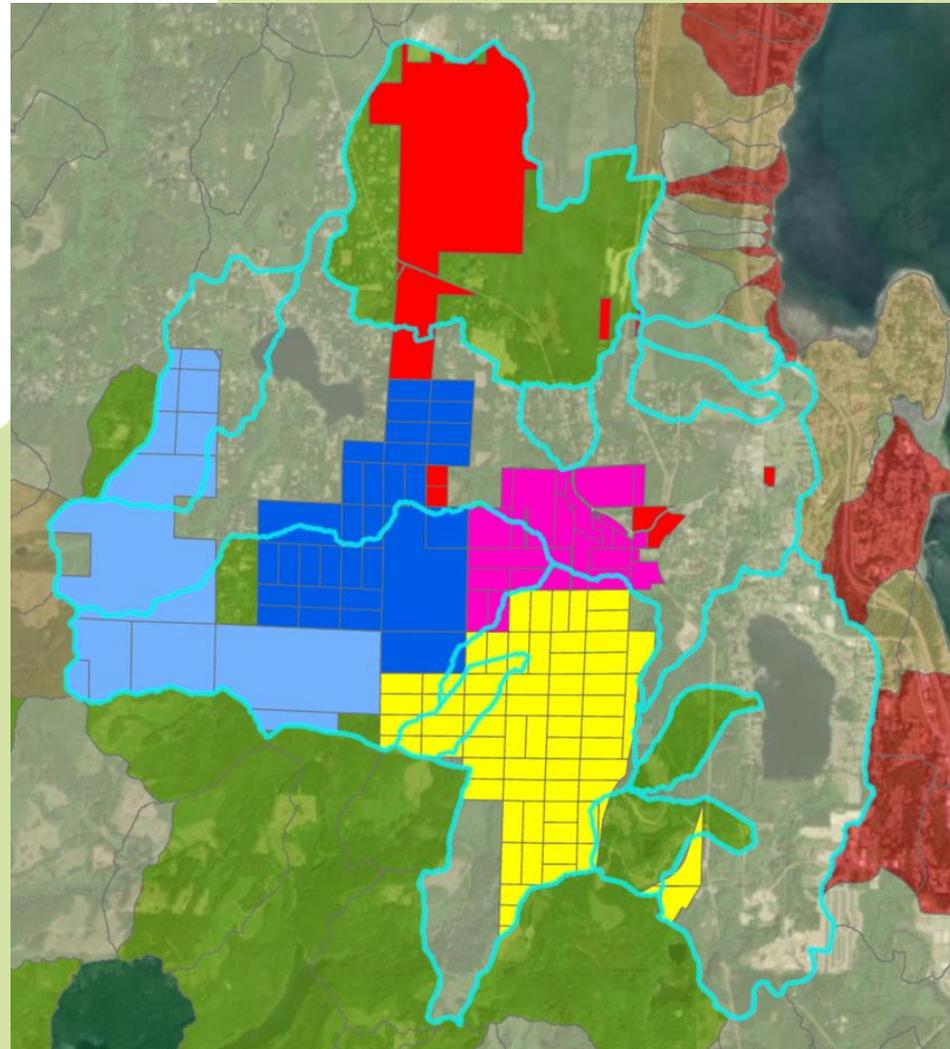
Chico Creek Watershed	Aggregate LOS	DLOS	LOS Gap
	50.06	60	9.94

Forest LOS score based on weighted average of MUs in the Watershed

There are many combinations of improvements across MUs to reach a watershed wide LOS of 60

Current LOS is 50.06

Goal is to expand overall forest cover by 494 acres and expand mature forest cover by 2,615 acres

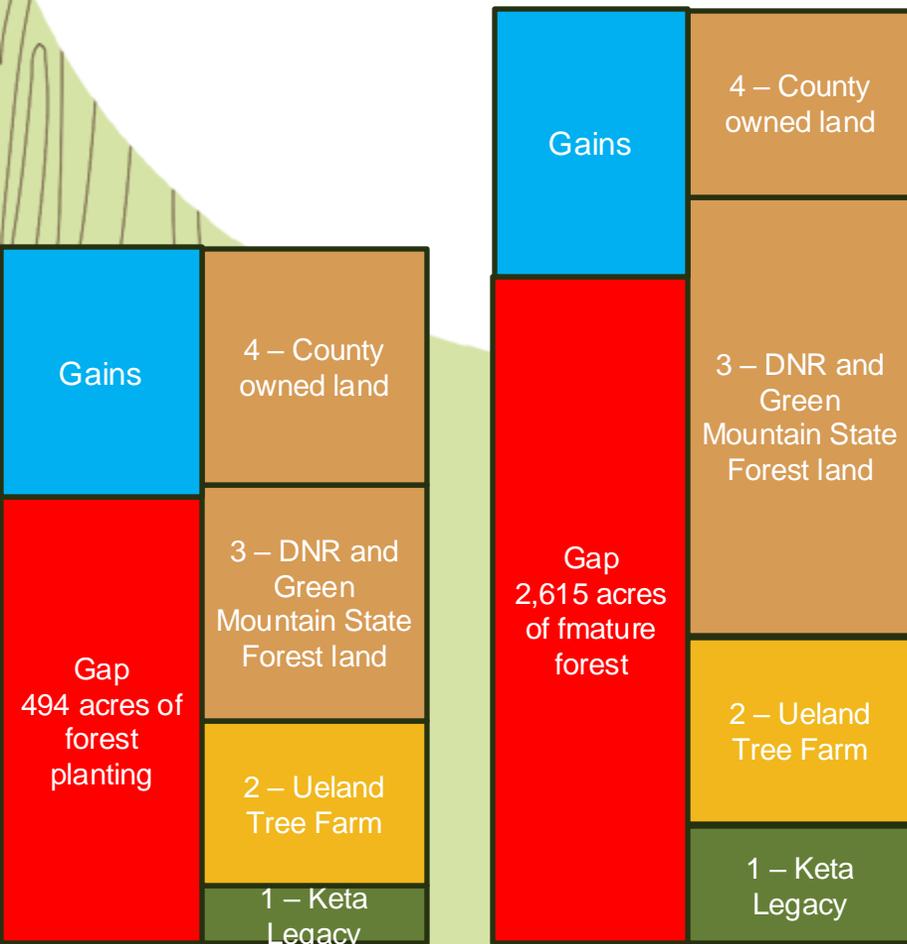


- Keta Legacy
- Ueland Tree Farm
- DNR
- Green Mt State Forest
- County Owned

Gap
-9.94

Forest Actions in Chico Creek

- Any other actions currently under way?
- Identifying any roadblocks?
- What workarounds can we identify for any roadblocks?

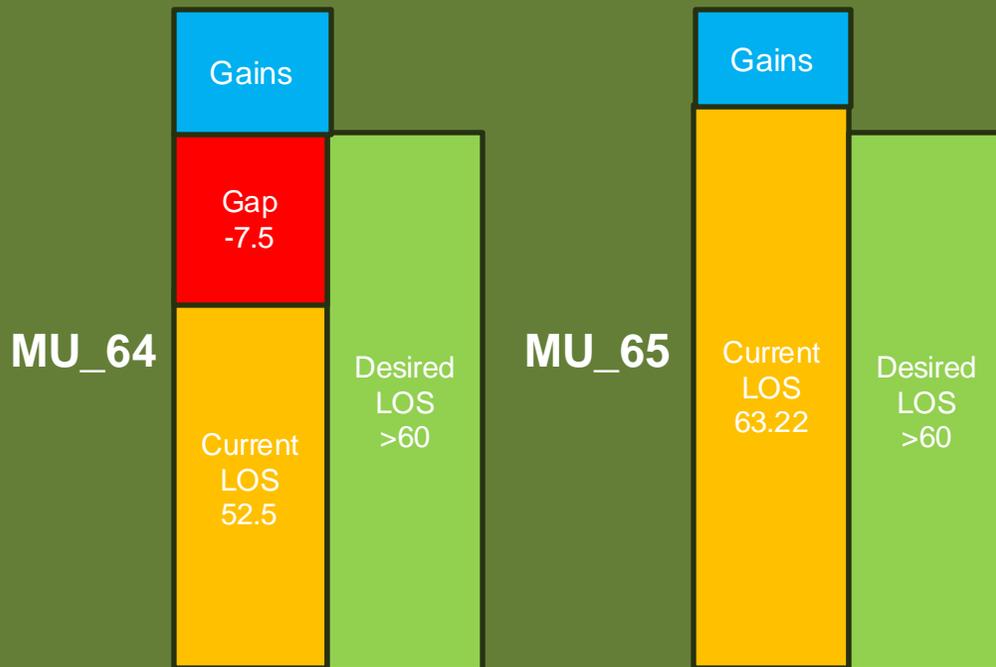


Action	Change in F1 forest cover	Change in F2 mature	Change in LOS	Status
1 - Current Keta Legacy	28.68 acres	261.79 acres	TBD	Protected
2 - Ueland Tree Farm land	265.66 acres	904.33 acres	TBD	Potential Progress
3 - Adjacent DNR and Green Mt State Forest Land	216.25 acres	1489.88 acres	TBD	Not yet started
4 - County owned land	123.34 acres	517.53 acres	TBD	Not yet started
Total	633.93 acres	3173.53 acres	TBD	

Shorelines in Big Beef Creek

- July 2024 conditions assessment

Unit	LOS	DLOS	LOS Gap
MU_63	70.12	60	+10.12
MU_64	52.50	60	7.5
MU_65	63.22	60	+3.22



July 2024 feedback:

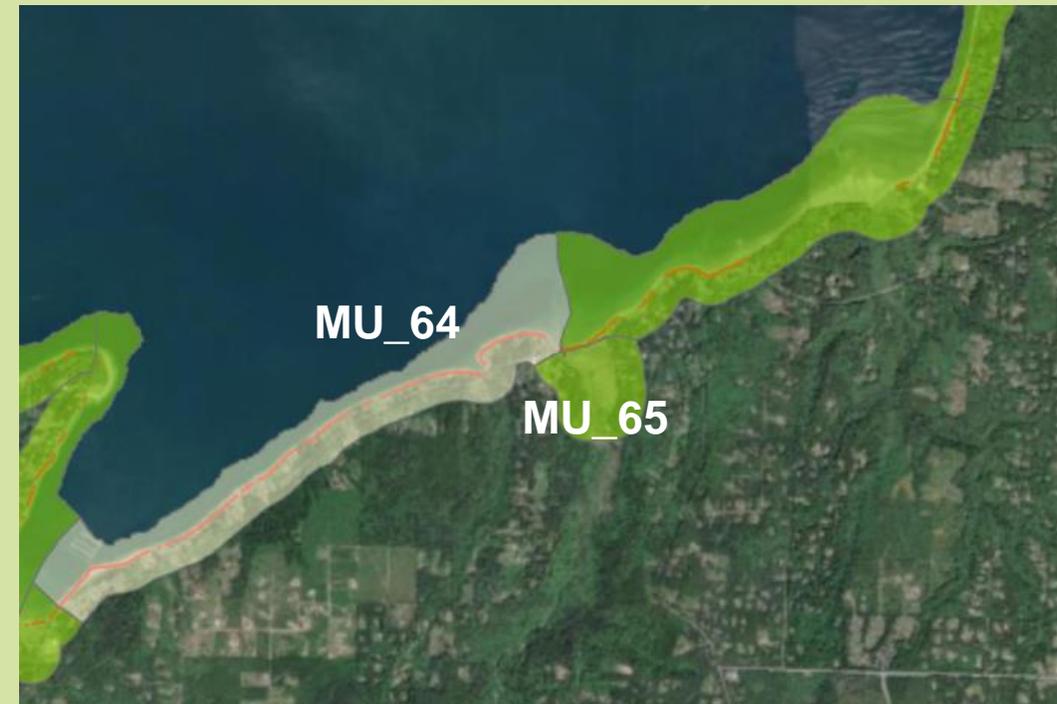
Table A7. Scenarios proposed to the Core Team for shorelines in Big Beef Creek

SCEN	WHAT	COST	WHO	LOS improvement
1	Increase forest cover to 90% or 4563 ft of planting	\$228,000	WDFW, Roads Div., KCD, ...	MU_64 +13.8 MU_65 +5.5
2	Decrease armor to 50% or remove 4021 ft	\$4,020,000	Roads Div., Shore Friendly	MU_64 +9.7
3	Admin step (no in situ action)	Nom.	KCHD, DOH	MU_65 +16.7
4	Decrease bacteria via PIC Program	\$100,000	KCHD, DOH	MU_65 +16.67
5	Increase forest cover by planting 1799 ft and reduce armoring by removing 892 ft	\$981,950	Roads Div., Shore Friendly, WDFW, KCD	MU_64 +6.9 MU_65 +3.3

Big Beef Creek Shorelines Map

 = extent of shoreline armoring

Unit	LOS	DLOS	LOS Gap
MU_63	70.12	60	+10.12
MU_64	52.50	60	7.5
MU_65	63.22	60	+3.22



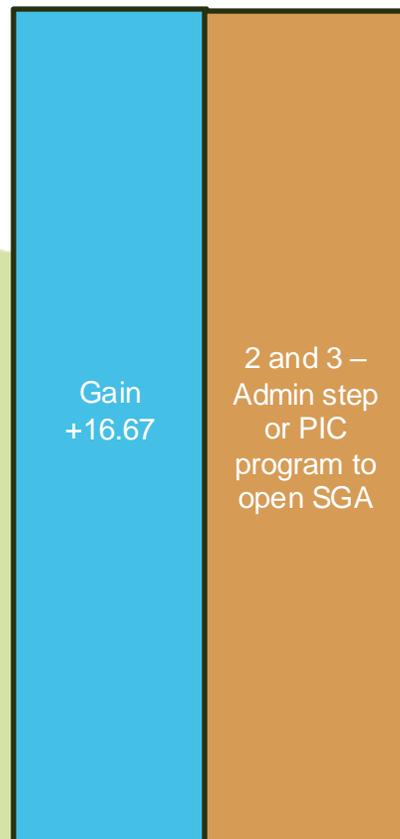
Attribute	Indicator	Condition Rating				
		Very Low	Low	Medium	High	Very High
M1. Shoreline Armoring	% shoreline armoring	>75%	50%-75%	25%-50%	1%-25%	<1%
M2. Shoreline Vegetation	% canopy cover	<40%	40%-55%	55%-70%	70%-85%	>85%
M3. Shellfish Growing Areas	SGA commercial classification	Prohibited	Prohibited & Conditional/Apr.	Conditional	Conditional & Approved	Approved
LOS Score		0-20	20-40	40-60	60-80	80-100

Shoreline Actions in Big Beef Creek

- Any other actions currently under way?
- Identifying any roadblocks?
- What workarounds can we identify for any roadblocks?

MU_64

MU_65



Action	Change in M1 Shoreline Armor	Change in M3 SGA Classification	Change in LOS	Status
1 - Remove 4021 ft of shoreline armoring in MU_64	-6000ft	N/A	+11.65	Completed targeted outreach to 6000 ft of private armoring
2 - admin step to open SGA in MU_65	N/A	Prohibited to Approved	+16.7	TBD
3 - PIC Program around MU_65	N/A	Prohibited to Approved	+16.7	Not yet started

Shorelines in Chico Creek

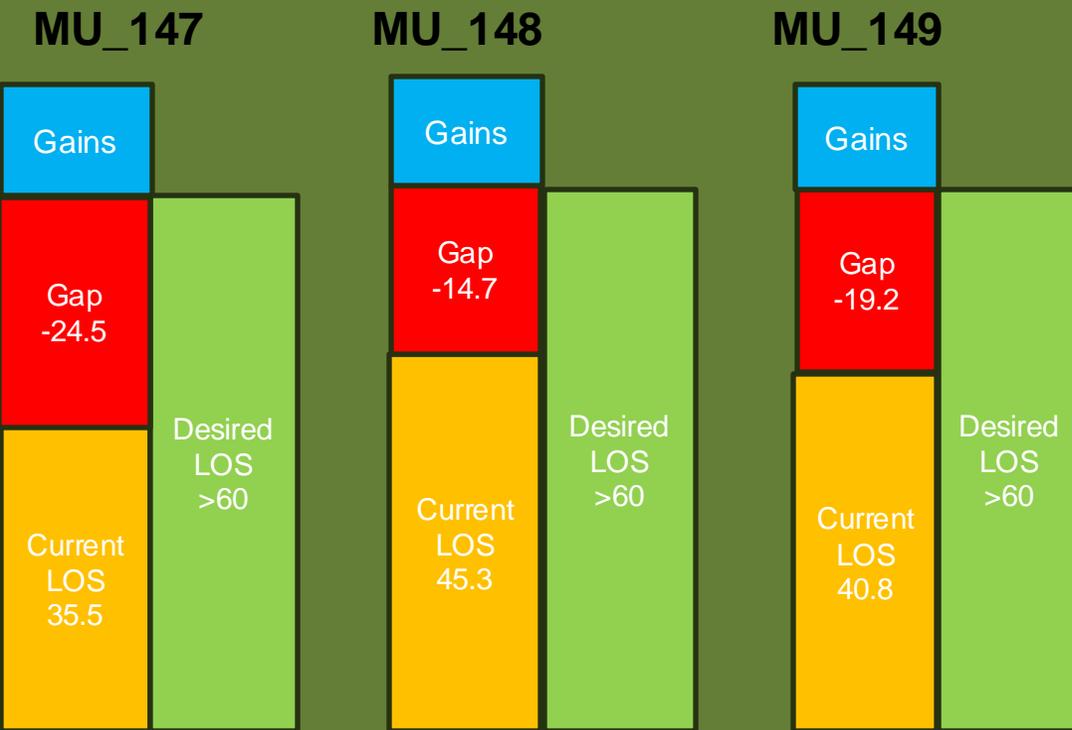
- July 2024 conditions assessment

Unit	Current LOS	DLOS	LOS Gap
MU_147	35.5	60	24.5
MU_148	45.3	60	14.7
MU_149	40.8	60	19.2

July 2024 feedback:

Table A10. Scenarios proposed to the Core Team for shorelines in Chico Creek.

SCEN	WHAT	COST	WHO	LOS Improvement
1	Increase forest cover to 95% by planting 7,240 ft	\$362,000	WDFW, WSDOT, KCD, ...	MU_147 +25.3 MU_148 +21.8 MU_149 +20.6
2	Decrease shoreline armoring to 15% by removing 5,548 ft	\$5,548,000	WSDOT, Shore Friendly	MU_147 +20.2 MU_148 +0.1 MU_149 +19.2
3	Admin step (No in situ action)	Nom.	KCHD, DOH	MU_148 +13.3
4	Decrease bacteria via PIC program	\$100,000	KCHD, DOH	MU_148 +13.3
5	Increase forest cover by planting 2397 ft and remove 2886 ft of shoreline armoring	\$3,312,850	WDFW, WSDOT, KCD, KCHD, DOH, Shore Friendly	MU_147 +24.6 MU_148 +17.4 MU_149 +19.3

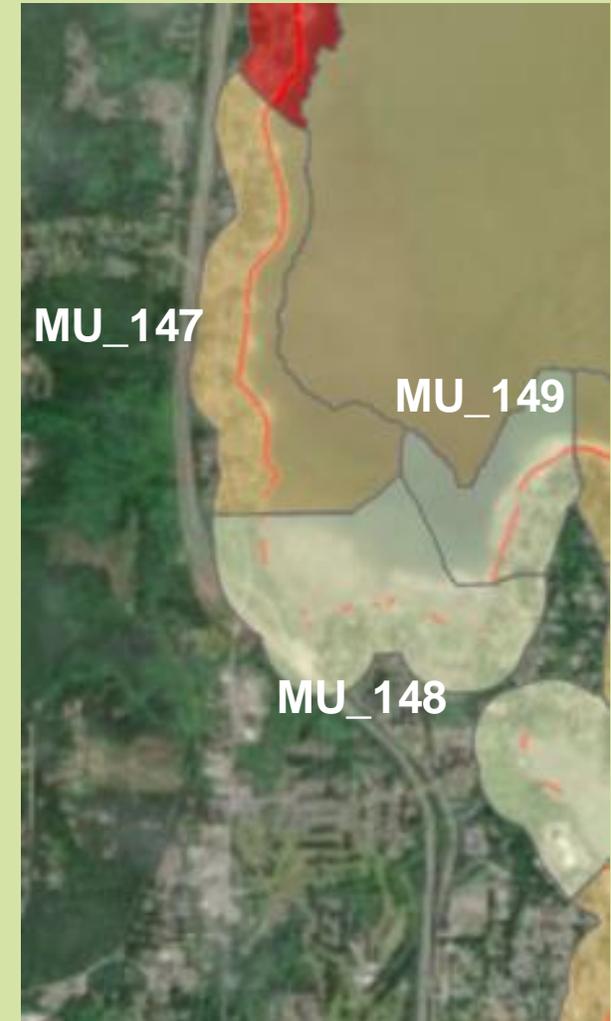


Chico Creek Shorelines Map

Unit	Current LOS	DLOS	LOS Gap
MU_147	35.5	60	24.5
MU_148	45.3	60	14.7
MU_149	40.8	60	19.2

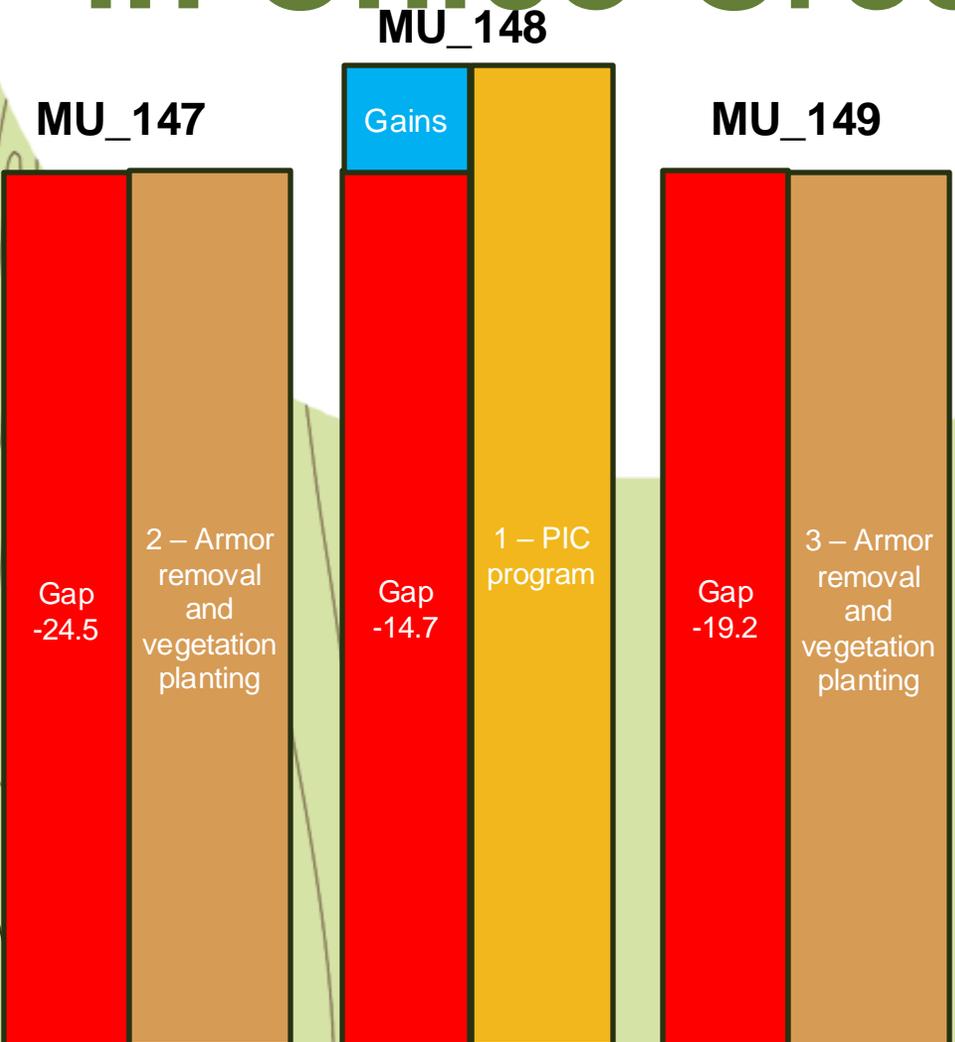
_____ = extent of shoreline armoring

Attribute	Indicator	Condition Rating				
		Very Low	Low	Medium	High	Very High
M1. Shoreline Armoring	% shoreline armoring	>75%	50%-75%	25%-50%	1%-25%	<1%
M2. Shoreline Vegetation	% canopy cover	<40%	40%-55%	55%-70%	70%-85%	>85%
M3. Shellfish Growing Areas	SGA commercial classification	Prohibited	Prohibited & Conditional/Apr.	Conditional	Conditional & Approved	Approved
LOS Score		0-20	20-40	40-60	60-80	80-100



Shoreline Actions in Chico Creek

- Any other actions currently under way?
- Identifying any roadblocks?
- What workarounds can we identify for any roadblocks?



Action	Change in M1 shoreline armoring	Change in M3 SGA Classification	Change in LOS	Status
1 – PIC Program around MU_148	N/A	Prohibited to Approved	+20	In progress – KPHD ongoing work in Chico Bay
2 – Shoreline armor removal and vegetation planting in MU_147	3957.25 ft armor removal 1226.7 ft vegetation planting	N/A	+24.78	Not yet started
3 – Shoreline armor removal and vegetation planting in MU_149	1411.79 ft armor removal 139.82 ft vegetation planting	N/A	+19.48	Not yet started

Next Steps

- Refine actions based on your feedback
- Similar analysis of streams, where does riparian vegetation overlap with protected forest?
- Draft memo for December, actions to carry out in 2025



THANK YOU

We have gaps to close, AND we have discrete actions that are achievable to work towards our DLOS.

Many of these actions are already underway!

Robinson

Low robinson@waconservationaction.org



**WASHINGTON
CONSERVATION
ACTION
EDUCATION FUND**

County-wide Decision-Making Framework for KNRAMP

Goals

Provide Kitsap County Natural Resource managers with tools to engage with Kitsap County divisions and other organizations working on natural assets to identify opportunities to implement projects/actions across the County.

Provide guidance on how Levels of Service (LOS) information will be produced and provided for use by Kitsap County divisions and partners, as well as evaluation considerations to develop actions to improve natural assets across Kitsap County.

Information is intended for use by Kitsap County and the Core Team.

The Core Team will act as an Advisory Group for KNRAMP implementation, including following the decision-making process and adaptively managing KNRAMP as it is carried out across Kitsap County.

Steps for Using KNRAMP Information in County Decision-Making

1	LOS Status Assessment	Identify the current levels of service (LOS) across the County.	
2	Advisory Group Discussion	Review the County-wide LOS status maps and identify areas and associated actions that KNRAMP will advance.	
3	Partner Engagement	Package County-wide LOS status with information on KNRAMP focus areas and actions and share with County departments and other organizations to inform priorities and investment decisions.	
4	Adaptive Management	Continue to monitor LOS status in selected and non-selected geographies.	

1: LOS Status Assessment

Purpose: Identify the current levels of service (LOS) across the County.

Step 1A: Generate county-wide LOS maps

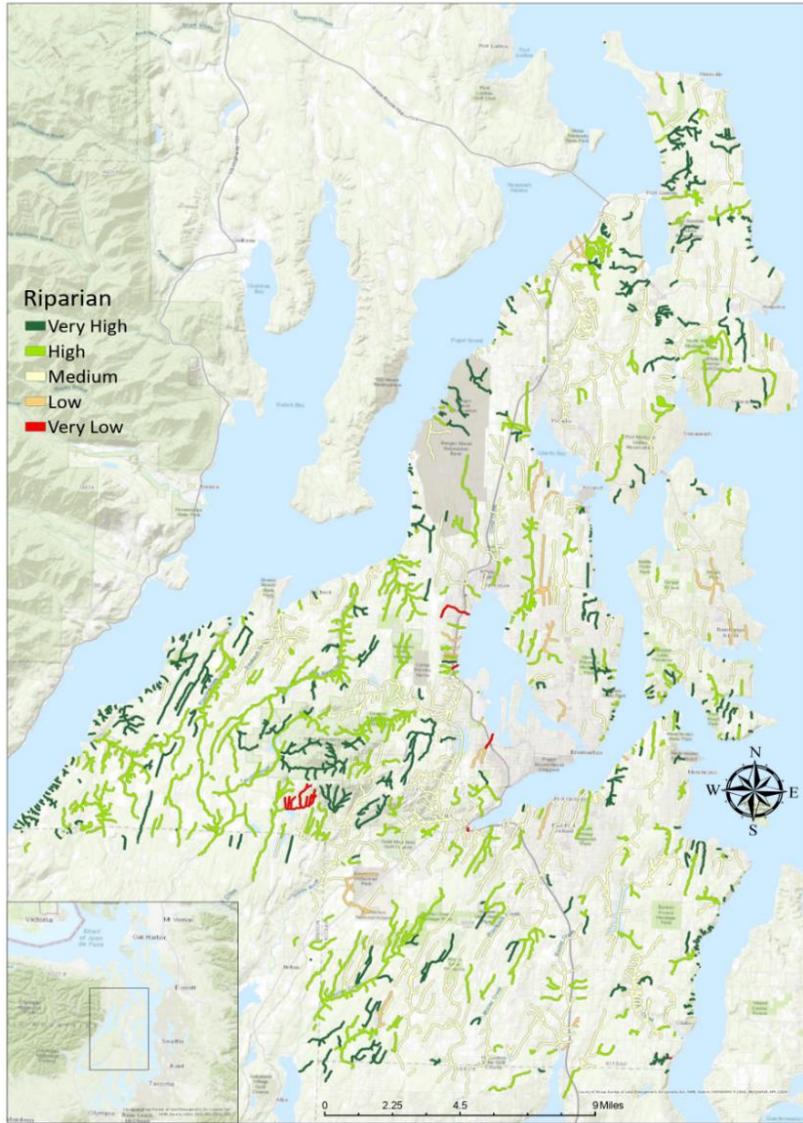
- Current LOS for marine shorelines, forests, streams
- Changes in LOS since the last assessment
- The LOS for each attribute tracked by KNRAMP

Step 1B: Develop detailed LOS status information

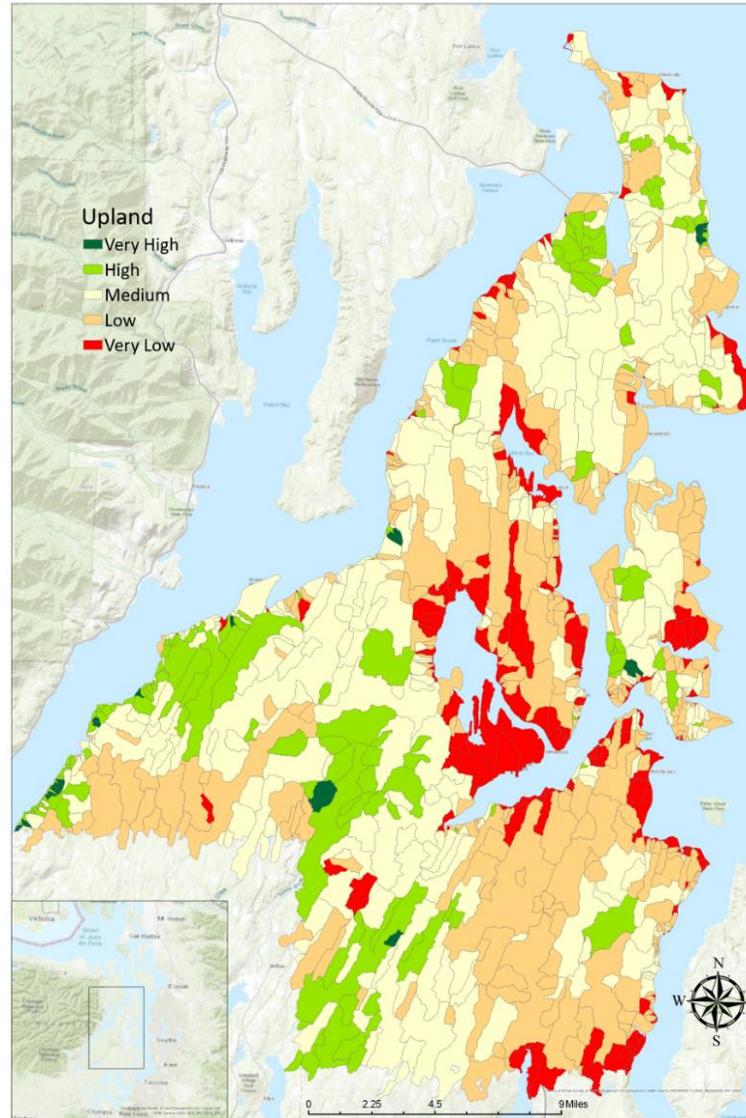
- Use evaluation considerations to generate detailed data.
- Include attributes driving the LOS, area size, geographic content, risk, urgency, and significance.

2024 County-wide LOS Status Maps

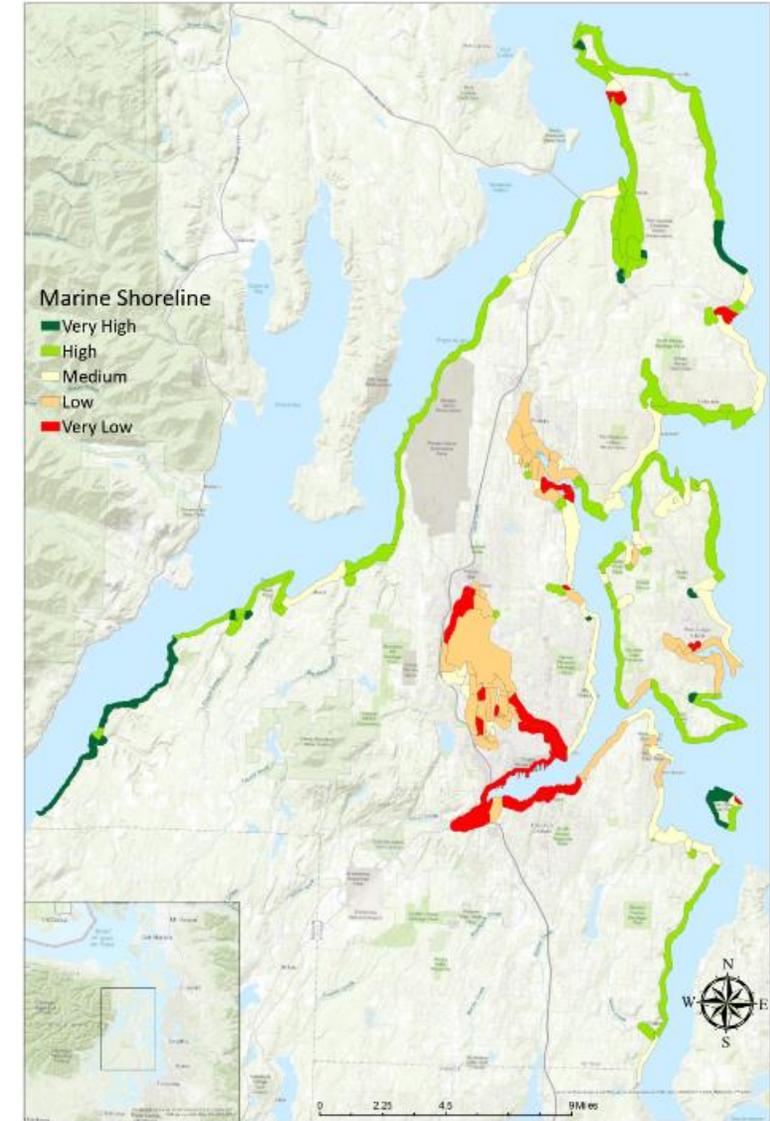
Streams



Forests



Shorelines



2: Advisory Group Discussion

Purpose: Review the County-wide LOS status maps and identify areas and associated actions that KNRAMP will advance.

Step 2A: Review the annual LOS status maps and identify geographies and/or assets to focus on

- Restoration needs: Areas below desired LOS.
- Preservation needs: Areas at or above desired LOS.

Step 2B: Use the evaluation considerations to identify KNRAMP actions to focus on within the identified geographies and assets

- Low hanging fruits: Easy impactful actions.
- More complex actions: Require more resources and coordination.

Step 2C: Identify partners for KNRAMP actions

- Partners that have similar priorities or may have existing work.

3: Partner Engagement

Purpose: Package County-wide LOS status with information on KNRAMP focus areas and actions and share with County departments and other organizations to inform priorities and investment decisions.

Step 3A: Develop annual report with the state of streams, forests, and shorelines

- Include maps, focus areas, and actions.

Step 3B: Collaborate with partners to inform planning processes

- Share report with County departments and organizations.
- County participates in annual planning processes of other County divisions.
- Conduct potential workshop to present results and identify collaboration opportunities.

4: Adaptive Management

Purpose: Monitor and refine KNRAMP implementation.

Step 4A: Monitor and evaluate the progress on selected geographies and actions from the previous year

Step 4B: Monitor the LOS status on non-selected geographies from the previous year to identify if they should be selected in the coming year

Step 4C: Discuss refinements and potential expansion of KNRAMP

- Refinements to the technical elements of the program: quality of the data used; new data that could be incorporated in Cartegraph.
- Potential KNRAMP expansion to additional assets and attributes.
- Policy/procedural aspects of the program.

Evaluation Considerations: Geographical

Purpose: Considerations to be mapped in Cartegraph

- **LOS and DLOS Status:** Current and desired levels of service.
- **Benefits:** Assets and attributes impacted, area size.
- **Geography Context:** Area type - public vs. private, inside vs. outside UGAs.
- **Significance:** Impact on overburdened communities and climate vulnerability.

Evaluation Considerations: Qualitative

Purpose: For Advisory Team Discussion

- **Consistency with County Policies:** Alignment with County policies.
- **Risk and Urgency:** Areas at risk of degradation; areas with limited benefits.
- **Timeframe:** Project complexity and phases.
- **Opportunity:** Shared priorities, collaboration potential, and funding pathways.
- **Feasibility:** Implementation potential.
- **Costs:** Estimated costs.

County-Wide LOS Decision-Making in Action: Shorelines – Hypothetical Example

Currently (August 2024):

Some units are at LOS,
others are below LOS.

Marine Shoreline Attribute Goals:

- **Shoreline Armoring:** Reduce to 1% - 25%.
- **Shoreline Vegetation:** Increase to 70% -85%.
- **Shellfish Growing Areas:** Achieve “Conditional & Approved” classification.
- **Cartegraph LOS Score:** Achieve 60-80 condition rating

Restoration Actions:

- Remove / soften shoreline armoring.
- Increase shoreline vegetation.
- Improve water quality (e.g. address septic system).

Preservation Actions

- Limit new shoreline armoring.
- Protect existing vegetation.
- Maintain water quality.

Key Partners

- Shore Friendly Program
- Kitsap County Department of Health
- Kitsap County Parks Department
- Regional fisheries Enhancement Groups

Discussion Questions:

1. Do you have any clarifying questions?
2. Are the process steps and evaluation considerations clear? Is anything missing?
3. Is it clear how KNRAMP coordinators/staff and the Core Team would use and implement the decision-making process in the future? If not, what is unclear?
4. What examples would be helpful to include in the Framework to exemplify the decision-making steps?