

# Toward a Natural Resources Asset Management Program for Kitsap County

## Summary of Accomplishments and Lessons Learned

### OVERVIEW

Kitsap County is home to many small, forested watersheds that provide clean drinking water and habitat for salmon and steelhead and maintain longstanding cultural practices for surrounding communities. The region has experienced rapid growth and is expected to continue growing. Innovative ways for considering ecosystem services will be critical for protecting essential natural resources while keeping up with growing development pressures.

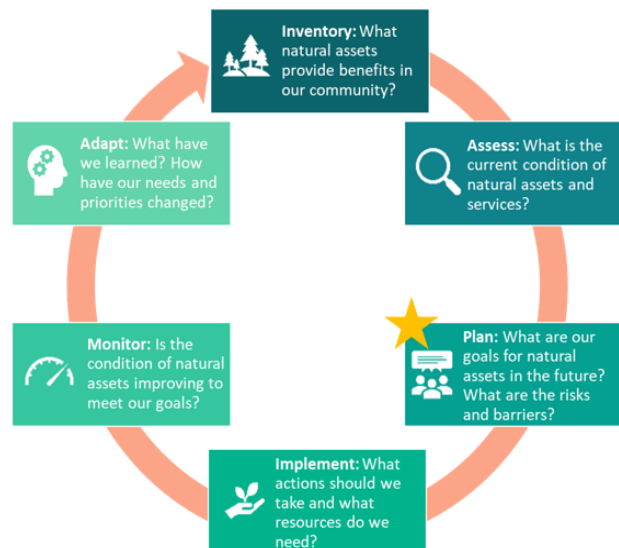


In Fall 2018, Kitsap County, the Port Gamble S’Klallam Tribe, the Suquamish Tribe, and Washington Environmental Council came together to develop and put in place a natural asset management program for Kitsap County (KNRAMP) focused on streams, forests, and marine shorelines. Although natural assets provide essential public and ecosystem services, establishing levels of service for natural assets is a new and innovative concept that draws from standard asset management approaches that local governments already use to manage gray infrastructure such as roads and pipes and applies best available science and monitoring information.

Natural asset management places ecosystem services at the center of decision-making to ensure that natural assets and ecosystem recovery goals are prioritized and integrated into local planning. Implementing the program will help the county monitor asset condition, make strategic investments, and support progress towards local policy goals.

The goals of the KNRAMP are to:

- Apply traditional asset management concepts to natural assets;
- Explore options to assess the current and preferred levels of service for Kitsap County streams, forests, and marine shorelines;
- Enable the county to balance the impacts of land use decisions with protecting the functions of natural assets;
- Provide a prioritization planning tool for implementing Kitsap County’s policy goals, including the Comprehensive Plan.



*This diagram provides a simplified overview of the process for developing, implementing, and adaptively managing a Natural Asset Management*

## ACCOMPLISHMENTS

The main work in developing the KNRAMP program so far focused on case study research and initial assessment of natural asset conditions, identifying asset management framework options, and developing preliminary desired levels of services for forests, streams, and marine shorelines. More work is needed to refine the desired levels of services and integrate natural resources asset management into Kitsap County processes. The following is a summary of current accomplishments.

- *Collaborative work*

In Fall 2018, a series of interviews were conducted with local governments, tribes, and non-governmental organizations to identify potential challenges and opportunities for creating a natural resources asset management program. The interviews showed that such a program would be an opportunity to improve human wellbeing, create more visibility and support for natural resource protection and restoration, and help advance the County’s policies related to current and future environmental needs. A core team including Kitsap County, the Port Gamble S’Klallam Tribe, the Suquamish Tribe was formed to further scope and develop the program. A partner workshop and survey early in the project helped identify priority ecosystem services for forests, streams, and marine shorelines that are important to Kitsap County communities.

- *Research of existing similar efforts*

The team looked at emerging research and examples of levels of service for natural assets, particularly in Gibsons, British Columbia, the first community to formally adopt natural asset management. The team also reviewed the Municipal Natural Asset Initiative, a research entity, that built on Gibsons experience to bring natural asset management to over 100 municipalities in Canada, working on natural asset inventories and supporting early implementation efforts.

- *Rapid review of Kitsap County and Puget Sound policies*

The team reviewed key goals and targets already in place for Kitsap County and the Puget Sound region. This included local plans and policies, ecosystem recovery plans for WRIA 15, salmonid recovery plans, and levels of service already used by Kitsap County in other areas of their comprehensive and capital facilities planning.

- *Development of draft desired levels of service framework, including metrics for assessing asset condition*

The team developed a draft high-level asset management framework for forests, streams, and marine shorelines, drawing from reviewed resources and based on feedback from project team. The framework includes desired level of service goals, objectives, and targets to be further refined and formalized. The team also identified attributes that describe functional ecosystem services and metrics that can help assess asset condition and track progress.

Road with  
**A** rating



Road with  
**F** rating



River with  
**A** rating



River with  
**F** rating



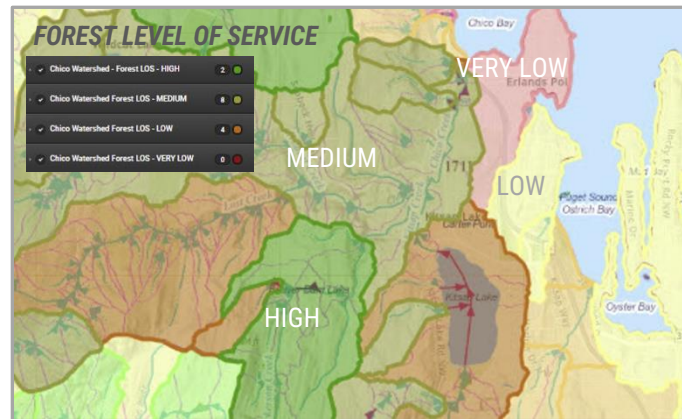
*Establishing current and desired levels of service for natural assets parallels the approach Public Works departments use for roads.*

- *Natural asset condition updates added into Cartegraph, Kitsap County's asset management software program*

The team updated Cartegraph with natural asset condition information based on current research for the desired levels of service framework. Cartegraph will continue to be updated and maintained as new data becomes available.

- *Outreach and Communications*

All members of the core team participated in the Salish Sea Ecosystem Conference and gave presentations on KNRAMP in other venues as well. This helped gather broader input and facilitated the exchange of best practices across other jurisdictions that may consider similar efforts.

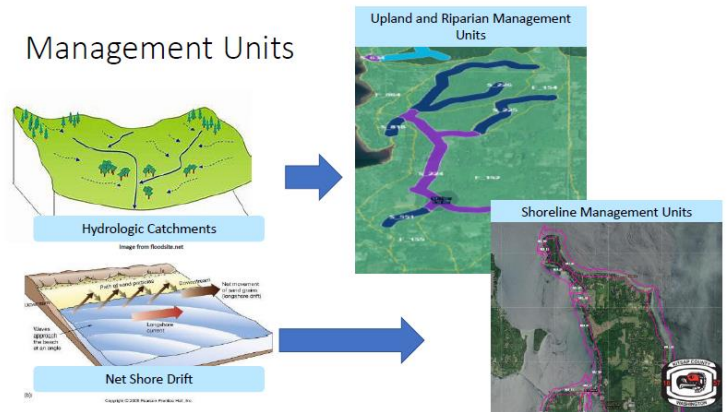


## LESSONS LEARNED

The following lessons learned will be a useful reference for Kitsap County to define its next phases of work, and potentially useful for other jurisdictions working on natural asset management.

1. *A phased approach is necessary when developing a natural asset management plan.* This is particularly true for small jurisdictions with limited resources. A first step in the process is identifying the natural asset(s) that the plan should focus on. Once developed, the plan could be replicable and expanded to additional natural assets as needed. KNRAMP focused on streams, marine shorelines, and forests in Kitsap County.
2. *Determining the preferred framework of the asset management plan is important before building out the details.* There are different ways to structure the levels of service framework depending on suitability and preference across jurisdictions. Municipalities must choose a format that is compatible with the jurisdiction's existing planning frameworks and goals. The KNRAMP team assessed a few options, including: identifying overarching goals, objectives, and specific targets to measure activities and outcomes; identifying specific priority geographies to restore or maintain a high level of service; and setting population-based levels of service for natural assets to help ensure that environmental services are maintained as the region grows. The KNRAMP project team primarily focused on the first alternative.
3. *Identifying how jurisdictions want to use the asset management plan and track progress will determine the approach for building out the details.* Asset management plans could be used for monitoring or as prioritization planning tools, e.g., for land use, protection, or restoration of natural resources. Determining the intended use of the plan will help identify how objectives and targets should be set including if they should be qualitative, quantitative, or both, and to what extent they should be based on local plans and policies where possible and where data is available.

4. **The scale of the asset management plan should be discussed in the early stages.** Natural resources function on a big scale, and a county-wide approach may work best and allow cities or towns to implement the plan. The project team discussed scalability and variation of levels of services across the County. For example, some level of service targets could apply to watersheds or sub-watersheds, some could vary based on zoning or similar designations (e.g., inside urban growth areas, or UGAs), or use other boundaries. Or levels of service could be defined only for specific assets such as priority wetlands. While it is not clear how to best do this and how much variation there should be between level of service objectives, the main goal is to keep the level of complexity manageable.



5. **Building out the details is an iterative process and requires technical expertise.** The KNRAMP program leveraged the expertise of the project team members to develop approaches that are scientifically valid yet applicable and pragmatic for ease of implementation. The project also benefited from strong GIS technical expertise to quantify and map the levels of service provided by streams, marine shorelines, and forests in the County.
6. **Having an asset management software to include the objectives and targets of the asset management plan is helpful.** KNRAMP used Cartegraph to house the mapping data for streams, marine shorelines, and forests developed by the project team. This helped document the team’s work and will be used in future phases of this effort.
7. **Regular coordination with other organizations supports the exchange of ideas and best practices.** Before developing KNRAMP, the project team identified existing or similar efforts conducted by other jurisdictions, particularly from Canadian municipalities. Regular conversations with other jurisdictions help identify other asset management activities and surface replicable best practices.
8. **Any program must address the values provided by the natural resources, including cultural values for tribal members.**
9. **Managing natural assets must be adaptive.** The concepts, tools and data, and plans and targets must be regularly evaluated and evolve as needed.

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