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# **MEMORANDUM**

TO: Honorable Whatcom County Council

THROUGH: Aly Pennucci, Whatcom County Deputy Executive

FROM: Bennett Knox, Parks & Recreation Director

Christ Thomsen, Parks Operations Manager

Elizabeth Kosa, Public Works Director Gary Stoyka, Natural Resources Manager

Chris Elder, Senior Planner

RE: Background Information

Stewart Mountain Community Forest Phase II

DATE: July 22, 2025

# **Background and Purpose**

Stewart Mountain Community Forest (SMCF) is a proposed 5,500-acre section of forestland on Stewart Mountain intended for sustainable forestland management for the use and benefit of the local community and environment. Phases I and II of this project have been a collaboration between the Nooksack Indian Tribe, Whatcom County, Whatcom Land Trust, and The Evergreen Land Trust Association, collectively referred to as the Core Planning Team. The Core Planning Team has supported various components of this project over the past 8 years and continues to contribute to the development of a shared vision for SMCF. The Stewart Mountain Community Forest also secured support and input from the WRIA 1 Watershed Management Board and Watershed Staff Team as well as the broader community.

# Goals

The main purpose of the Stewart Mountain Community Forest is to manage the property as a working forest that balances a variety of ecological, economic, and community benefits in support of the following goals:

- 1. Enhance watershed health and improve water quality and quantity.
- 2. Promote an ecological forestry-based economy for living-wage jobs.
- 3. Increase biodiversity and enhance fish and wildlife habitats.
- 4. Expand community access for cultural uses and non-motorized recreation.

These goals were developed by the Core Planning Team, and were significantly informed by Phase I of the WRIA 1 Regional Water Supply Plan and development of the Strategic Vision Framework with input from the Interim Community Advisory Team. Phase I of the WRIA 1 Regional Water Supply Plan identified improved forest management on Stewart Mountain as the highest ranked project to improve streamflow in the Nooksack River.

# **Brief History & Project Overview**

# **Project Timeline**

Below is a condensed timeline of studies, funding awards, community engagement, and other milestones further described below. This timeline is intended to provide a general overview of key developments in the SMCF effort.

#### 2017

- Watershed Function and Forest Management Study
- South Fork Nooksack River Reach-Scale Plan
- Tour of Stewart Mountain with new owner Conservation Resources

#### 2018

Nooksack Tribe South Fork Nooksack River Watershed Conservation Planning

## 2019

WRIA 1 Rule Amendment and WRIA 1 Watershed Plan Update

#### 2020

Nooksack Indian Tribe Climate Change Adaptation Plan

# 2021

- April WRIA 1 Regional Water Supply Plan Phase I completed
- May WLT Receives NPS RTCA Phase I Planning Assistance
- September Kick-off of Strategic Vision Framework Development
- Interim Community Advisory Team initiated
- Whatcom County Climate Action Plan adopted

#### 2022

- WC Council (AB2022-047) authorizes \$1,500,000 in Conservation Futures toward Phase I Acquisition
- Conservation Resources sells 550 acres to WLT (Phase I Acquisition)

#### 2023

- Whatcom County awarded Puget Sound Acquisition and Recovery (PSAR) program grant for \$2,900,000 which includes \$1,500,000 of reimbursement funds to Conservation Futures for SMCF Phase I
- Interlocal Agreement with Western Washington University
- Whatcom County Awarded \$5,517,000 Streamflow Restoration Grant through the Washington State Department of Ecology for Phase II Acquisition

#### 2024

- Whatcom County Parks & Recreation Dept. joins Core Planning Team
- WLT Secures \$3,000,000 through the Washington State Recreation and Conservation Office Community Forest for Phase II Acquisition

## 2025

- NPS RTCA Phase II Planning Assistance Begins (Cultural and Recreational Access Planning) Planned/Proposed Action Items for 2025
- Signed Streamflow Restoration Grant Agreement for \$5,517,000 to support Phase 2 acquisition.
- Acquisition of Phase 2

# **Community Engagement**

The South Fork Nooksack Valley is home to about 600 people (based on the best available 2020 U.S. census data), including approximately 125 members of the Nooksack Indian Tribe, whose ancestors have lived there since time immemorial. The community engagement described in the Strategic Vision Framework builds on five years of extensive public outreach conducted during the Nooksack Tribe's South Fork Nooksack River Watershed Conservation Planning effort, which included educational forums, community workshops, and a 44-member citizen Watershed Planning Group. This process resulted in the formation of the South Fork Watershed Education Committee and the Stewart Mountain Community Forest initiative. Building on the Watershed Conservation Planning and other community engagement efforts over the years, including decades of grassroots efforts led by the Downslope Neighbors Association and others, Whatcom Land Trust applied for technical assistance in March of 2021 with the National Park Service's Rivers, Trails, and Conservation Assistance (NPS-RTCA) program to support the community forest planning process. The award of technical assistance was confirmed in May of that year, and planning calls with the Land Trust and NPS-RTCA staff took place beginning in June 2021, which led to convening the Interim Community Advisory Team and development of the Strategic Vision Framework.

Community engagement to date has included the development and hosting of a website (<u>Stewart Mountain Community Forest Initiative</u>), engagement with the County Council, and the following County advisory committees:

- 1. Climate Impact Advisory Committee
  - The Climate Impact Advisory Committee developed an entire forest chapter in the climate action plan, including recommendations for ecological and climate-resilient

forest management techniques and principles. The Committee has been updated on the progress of the Stewart Mountain Community Forest over the past several years.

# 2. Forestry Advisory Committee

County staff have engaged the Forestry Advisory Committee over the past several years and worked to address their comments and concerns regarding Stewart Mountain Community Forest. A primary concern of the committee is that the forest will be removed from active management, which will therefore reduce the available working forest land base. Staff highlighted the need and intention of actively managing the forest to improve watershed health and contribute to the forestry economy.

#### 3. Forest Resilience Task Force

- The Task Force has received minimal updates as their primary focus has been on developing a forest resilience plan, through goals and objectives developed by the Task Force to date, align with the stated goals of Stewart Mountain Community Forest
- 4. Stewart Mountain Community Forest Interim Community Advisory Team (*not an official County advisory group*)
  - A group of 16 community members representing a broad suite of different interest groups in the South Fork Valley and broader community came together to develop the Strategic Vision Framework.

Ongoing and future community engagement will continue using multimedia and provide updates to County Council and advisory committees.

#### Core Planning team

A Core Planning Team with representatives from Nooksack Indian Tribe, Whatcom County, Whatcom Land Trust, and The Evergreen Land Trust Association formally convened to initiate planning for SMCF in summer 2021, though the same group had been meeting for years prior to address other South Fork watershed planning efforts. A kickoff meeting for the planning process was held at the base of Stewart Mountain at River Farm in September 2021, resulting in two major outcomes:

- 1. Consensus on developing a framework that articulates the benefits this community forest could provide in the South Fork Valley.
- 2. Outline for a community outreach and an engagement process that would inform the vision for this effort, articulate community values, and identify focus priorities for the forest.

A primary component of the community engagement plan was to conduct outreach with key groups in the forestry sector and community members who have been affected by, or have expressed interest in, the health of the forest and the watershed. The initial process was to convene a series of coffee chats with individuals throughout the South Fork community to determine when and how to effectively and efficiently involve all communities that have a presence in the Valley. These conversations took place during the fall of 2021 and the winter of 2022.

# Stewart Mountain Forestland

The Stewart Mountain properties have been identified as high priority for a number of decades, given their contributions to the South Fork Nooksack River. The South Fork Nooksack River is home to the Endangered Spring Chinook Salmon and is also listed as an impaired waterbody on the Department of Ecology's 303d list for both temperature and sediment. Improved forest management is a key action to address these water quality impairments and support recovery of the endangered salmon as described in the South Fork Nooksack River Temperature Total Maximum Daily Load Plan and WRIA 1 Salmonid Recovery Plan appendices.

Stewart Mountain has been owned by six different landowners over the past 30 years, resulting in a relatively young forest plantation with diminished watershed function. As each owner invested funds to acquire the property, they harvested large swaths of merchantable timber to recoup their investment. The rapid turnover of private ownership led to degraded long-term forest and watershed health, including lower streamflow contributions in late summer, degraded water quality, and impacts to fish habitats. These changes in land ownership also complicate public access and the ability for the local community to enjoy access for recreation, economic, educational, and cultural uses. Additionally, debris flows and landslides, as the result of the forest management activities, have caused damage to homes, infrastructure, and ecosystems. Specifically, the forest management activities, including road building, road maintenance, and timber harvests, implemented by previous owners and forestland managers have contributed to slope stability issues.

County involvement first started in 2017. Initial involvement included touring Stewart Mountain with the previous Parks Director, Mike McFarlane, Planning staff (at that time) Chris Elder, and the new property owner, Conservation Forestry (now Conservation Resources), shortly after they acquired the land. This tour included staff from all Core Planning Team entities and Washington State Department of Natural Resources (DNR). At the time, Conservation Resources is a for-profit private equity firm that acquires, manages, and harvests large tracts of forestlands owned approximately 5,550 acres of the proposed SMCF.

Conservation Resources indicated that they were willing and interested in selling acreage now. The features of the site itself, being steeper with numerous streams and other geologic features, and its importance to the recovery of the endangered spring chinook, and its potential contributions to streamflow enhancement demonstrated that its ecosystem and conservation values were important to the Whatcom County community. The concept of a community forest was borne from discussions at the Core Planning Team and explorations on best approaches to improve forest management in a collaborative manner. Projects such as the Nisqually Community Forest, Teanaway Community Forest, and Nason Ridge Community Forest provided examples of how a forest can be managed for multiple values and provide enormous value back to a community and ecosystem. Whatcom Land Trust served as the primary contact between the owner and the Core Planning Team over the years. Whatcom County staff had limited direct engagement with Conservation Resources staff.

The overarching intention is to manage the Stewart Mountain properties as a working forest that balances a variety of ecological, economic, and community benefits, such as watershed health, improved water quality, increased water quantity, sustainable forestry jobs, fish and wildlife habitat, and recreational access while improving climate resilience. The community forest will also expand access to the Nooksack Indian Tribe's ancestral lands for cultural, ceremonial, and subsistence uses. Active management of a forest to improve watershed health will require implementation of multiple different approaches, including:

- Harvesting at a longer rotation interval (i.e. moving from harvest at 35-40 years to 65-85 years),
- increasing buffer/no-harvest/reduced-harvest widths along streams and geologic features,
- road evaluation and abandonment in certain locations,
- moving towards variable retention harvest (moving away from large clear cuts to patch cuts or perpetual thinning projects),
- limiting/eliminating harvest on wetlands and other critical watershed features (which are currently permittable to harvest in most cases), and
- increasing overstory species diversity to ensure resilience to changes in climate (heat, precipitation, etc.).

Studies referenced at the end of this memo provide additional justification and guidance for the implementation of these management approaches.

# **Development Timeline**

Following the "Hirst Decision", the Washington State Legislature adopted Senate Bill 6091, which provided provisions for allowing exempt wells for homes in exchange for enhanced reporting, fees, and the identification of projects that would mitigate for the impacts of new exempt wells on instream flows. These measures were to be enacted by updating the WRIA 1 Watershed Plan through the process laid out in RCW 90.82. During this process, the WRIA 1 Planning Unit and Management Board identified the implementation of forest conservation measures on Stewart Mountain as the top project for mitigating instream flow impacts. Ultimately, the update to the WRIA 1 Watershed Management Plan was not approved and, by default, the Department of Ecology implemented reporting and fee requirements by amending the WRIA 1 instream flow rule (WAC 173-501); however, then implementation of forest conservation measures remains on the list of potential mitigation projects and Whatcom County is still required to report annually on the progress of the project. Furthermore, the WRIA 1 Watershed Management Board later supported development of a WRIA 1 Regional Water Supply Plan to identify strategies to enhance streamflow. Conservation management of Stewart Mountain was also the highest ranked project to enhance streamflow in this plan.

In 2020, Conservation Resources communicated readiness to sell an initial phase of the forest. The Core Planning Team identified the 550 acres of Phase 1 as the highest priority acreage given adjacency to the South Fork Nooksack River and the presence of approximately 150 acres of older growth forest ecosystem. Whatcom Land Trust led the acquisition process. The total purchase price of this phase was \$2,345,000. Whatcom County agreed to provide \$1,500,000 from the Conservation Futures fund for the purchase, which it planned to reimburse \$1,500,000 from Puget Sound Acquisition and Recovery (PSAR)

grant program. County funds were authorized by County Council on June 7, 2022, via Ordinance 2022-047. In October of 2022, Conservation Resources sold approximately 550 acres (Phase 1) to Whatcom Land Trust as fee title owner with Whatcom County holding a conservation easement over the property, assuring input on development of a forest management plan as seen in Figure 1. below. The County has entered into the grant agreement with the Washington Recreation and Conservation Office and is in the process of submitting documentation for grant reimbursement.

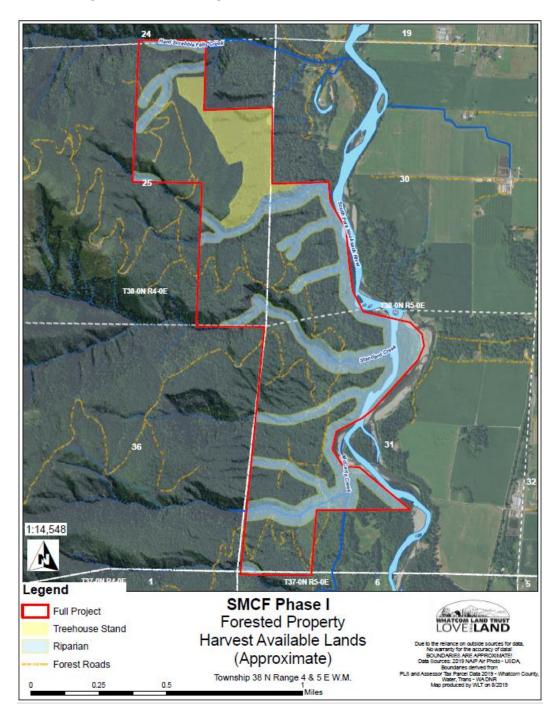


Figure 1. SMCF Phase I Map

The plan was for the remaining 5,000 acres to be acquired during subsequent phases as funds became available. As seen in Figure 2. below, the area outlined in yellow identifies the approximate extent of Stewart Mountain, and the area shaded yellow represents the approximate proposed boundary of Stewart Mountain Community Forest.

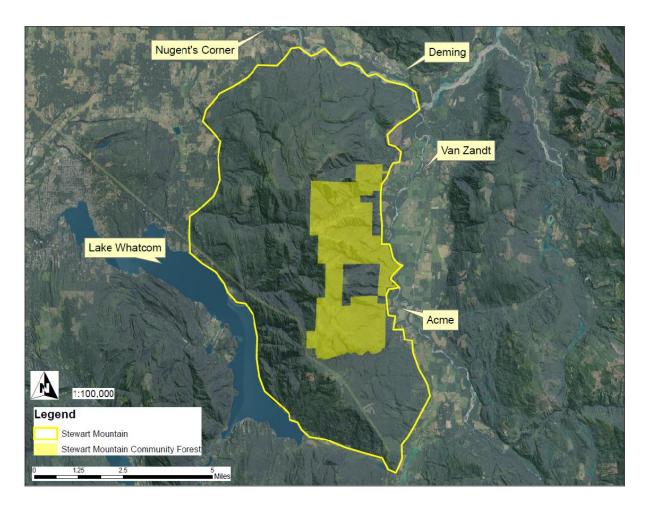


Figure 2. Full SMCF Proposal Map

# Departmental Involvement

While this effort first initiated with staff at Planning and Development Services, when Chris Elder was hired as a Senior Watershed Management Planner with Whatcom County Public Works, involvement in the Core Planning Team followed Chris to Public Works. Parks and Recreation Department staff Bennett Knox began attending Core Planning Team meetings in 2024.

The Public Works Natural Resources division is currently tasked with planning for watershed management, water quality, salmon recovery, climate action, floodplain management, and other natural resources. Public Works manages floodplain properties, although recent acquisitions also focus on

improving watershed management. Support for and implementation of additional watershed enhancement projects, including SMCF, are in various stages of development.

The Whatcom County Parks and Recreation Department is tasked with managing recreation lands, open space, conservation properties, senior services, historical sites, and museums, to name a few. With regard to forest management, Parks is currently developing a forest management plan from the perspective of ecological diversity, water quality protection, climate and fire resiliency, and compatibility with and in support of recreational opportunities for the Lake Whatcom reconveyance lands. Tribal engagement is a key component of their planning process. The Parks Department is also in the process of establishing a Land Management and Trails Division within its Operations and Maintenance portfolio. Specifically, this division of Parks is responsible for forest management, recreation trail construction and maintenance, and other land management activities like ecological restoration and volunteer programs.

# **Current Status**

Whatcom County has been awarded \$5,517,000 through the Washington State Department of Ecology Streamflow Restoration Grant program to contribute to Phase II of SMCF. This award is one of the largest ever offered through the grant program and aligns with our SB 6091 (Hirst Fix) list of streamflow enhancement projects. Whatcom County can enter into this grant agreement and apply funds to purchase Phase II regardless of whether Whatcom County is the owner of the site or not. Whatcom Land Trust also secured \$3,000,000 through the Washington State Recreation and Conservation Office Community Forest grant program with Whatcom County as sponsor on that agreement, which was authorized by Council on December 3, 2024. The currently available grant funding would allow the purchase of an additional 1,616 acres as a Phase II. This purchase will expand the community forest in the upland portions of the watershed. It is estimated that an additional \$18 to \$19 million will be required to complete the acquisition of the remainder approximately 3,384 acres (Phase 3).

A staff team was established and engaged for several years between 2021 and 2024, which included Deputy Executive Tyler Schroeder, Chief Civil Prosecuting Attorney Chris Quinn, PW Real Estate Manager Andrew Hester, Natural Resources Manager Gary Stoyka, and Senior Planner Chris Elder. Multiple ongoing meetings occurred with this group to discuss liability, risk, funding, management, watersheds, and a variety of other funding, transactional, and administrative details. This staff team supported the benefits associated with ecological forest management, streamflow enhancement, opportunities for tribal access, and the potential to improve recreational trail connectivity while also being concerned with the risks associated with additional ongoing funding requirements, staff availability for management, and accompanying new liabilities. Whatcom County, Whatcom Land Trust, Nooksack Indian Tribe, and Evergreen Land Trust have collaboratively and individually applied for funding and technical support to facilitate acquisition and management planning.

Council has generally supported implementation of the SMCF vision, with primary concerns focused on reduced contributions to the forestry economy. The Core Planning Team is confident that through implementation of improved and ecological forest management practices, the SMCF can continue to contribute to forestry jobs and deliver merchantable timber products, with the recognition that it will take a number of years to actively manage the forest into a healthy forest and productive ecosystem.

The benefits of improved forest management of the proposed acreage of SMCF cannot be overstated. Benefits to wildfire risk mitigation, carbon sequestration, streamflow enhancement, tribal access, community access, and forestry economy would all benefit from the shared vision of this project.

# Ownership Options

Several ownership options were reviewed. Three of those ownership options considered are listed below. The County Executive and County administrative team, as well as the entire Core Planning team (Whatcom County, Nooksack Indian Tribe, Whatcom Land Trust, and Evergreen Land Trust) recommends Option 1.

# Option 1:

- **Subsidiary Nonprofit Entity**: Create a new 509(a)3 Type 1 supporting organization as a wholly owned subsidiary of the Whatcom Land Trust
  - 509(a)3 is a type of 501(c)3
    - Allows for a liability firewall between parent and subsidiary organizations
    - Not required to secure Council approval for revenue decision making, allowing primary revenue source to be through harvest in the future, if feasible
    - Still eligible to receive grants to supplement forest income
  - Property acquisitions made by the Whatcom Land Trust, then transferred to the subsidiary
  - Properties owned by other entities (such as the County or Nooksack Indian Tribe) could be managed under a Memorandum of Agreement with the community forest to be managed as one larger community forest. This is partly required by grants received by the tribe, partly driven by a desire by all parties for it to be managed as one large block of forest land.

## Option 2:

- Co-ownership by Whatcom County and the Nooksack Indian Tribe: County and Nooksack
  Indian Tribe staff and legal counsel have met and developed a Memorandum of Agreement
  between the two entities to provide assurances and advise leadership and policymakers on the
  structure and expectations surrounding decision-making and management. The attached
  Memorandum of Agreement is still in draft phase.
  - Must comply with public process, including review and approval by administrations and Councils of both owners
  - Eligible to receive grants to supplement forest income from sources available to local governments and tribes.
  - Property acquisitions would require approval by both owners
  - o Jointly held properties would be managed under a Memorandum of Agreement

#### Option 3:

• Whatcom County ownership: This option would retain all management responsibility and liability within County operations and capacity.

Both options 1 and 2 would require establishment of a governing board. Governing board membership could include 1 or 2 representatives from each organization below:

Whatcom County

- Nooksack Indian Tribe
- Whatcom Land Trust
- Evergreen Land Trust
- Department of Natural Resources

Revenue generated under all ownership scenarios would be reinvested into the management and stewardship of the forest.

# Financials - Management Costs and Considerations Capital Funding (acquisition)

- Phase I 550 acres
  - Purchase price \$2,345,000, including \$1,500,000 from Conservation Futures Fund (approximately \$1,500,000 in reimbursement funds currently being pursued through Washington State Puget Sound Acquisition and Restoration Fund)
- Phase 2 1,616 acres (revised down from 2,346 acres)
  - Appraised price of \$8,800,000 (\$12,375,000 for the prior target acreage)
  - Seller open to selling a reduced acreage commensurate with funding secured, with the option to purchase additional acreage
  - Funding secured to support Phase II acquisition
    - \$5,517,000 grant agreement through Washington State Department of Ecology Streamflow Restoration Grant ready for presentation to County Council to support acquisition of Phase 2 of Stewart Mountain Community Forest, pending ownership decision. This grant agreement has not been signed, but needs attention soon in order to maintain the agreement.
    - \$3,000,000 grant agreement through Washington Recreation and Conservation
       Office Community Forest Program authorized by the Whatcom County Council
       on December 3, 2024 (AB2024-817) to support the acquisition of Phase 2 of
       Stewart Mountain Community Forest. This grant agreement has been signed.
- Phase 3 3,334 acres
  - Estimated cost of between \$18,000,000 and \$19,000,000
  - Could be purchased at a later date once funding is secured

# Revenue

- Timber Harvesting Revenue:
  - An initial assessment of the merchantable timber on Phase 2 indicates that approximately 800 acres are available for harvest over the next 10 years. This harvest

has an estimated \$2,031,000 worth of gross timber products available over the next 10-year time frame. Typical forest harvest contracts with harvest and logging crews would split harvest revenue 50/50, providing the owner with a net revenue of \$1,015,500. If this harvest was spread out over 10 years, this would result in approximately \$100,000 in revenue annually. Forest management costs are estimated to exceed this amount.

## • Other Possible Revenue Sources:

- O Washington State Department of Ecology's Combined Water Quality Funding Program could provide up to \$500,000 annually in the form of grants and/or low-interest loans to address non-point source pollution. Non-point source pollution indicates that a larger geographic area (not a single point source) can contribute to pollution. In this case, the degraded forest ecosystem contributes to elevated stream temperatures, due to decreased stream flows, as well as increased sedimentation. Forest management that improves forest health and reduces excess heat and sediment from polluting waterways is an allowable use of these funds. Grants and loans are available on a competitive basis, and as of State Fiscal Year 2024, non-point source-related projects do not require a match.
- The Natural Resource Conservation Service Environmental Quality Incentives Program (EQUIP) provides funding for forest health improvements. The Nooksack Indian Tribe and forest management partners are eligible to apply for these funds, though local governments are not eligible. The exact funding amounts available are uncertain and dependent on federal allocations, but large awards are not uncommon
- The Nooksack Indian Tribe has access to several additional funding sources for both monitoring and management that the local government does not have access to. The Nooksack Indian Tribe has \$100,000 available currently to support forest management activities from an existing grant and plans to continue including Stewart Mountain tributary temperature and streamflow monitoring in its long-term monitoring plan. Long-term costs associated with monitoring are not known at this time.
- Carbon credits remain an option for continued exploration, and several options exist to further explore the potential for this funding source. That said, Whatcom Land Trust and County staff have engaged multiple carbon brokers in recent years, and currently, the project area has been described as too small to be feasible.
- Public and Private Grants (e.g., America the Beautiful, Paul Allen, USFS Community Forest grant, and RCO Community Forest program) have all been used to help fund other PNW community forests and may be an option for Stewart Mountain.

- Private community donations could also be pursued as a source of revenue to leverage matching funds or grant opportunities
- Federal cost-sharing programs and partnerships may also be available to offset costs.

# **Grant Funded Technical Assistance**

Technical assistance was secured through the <u>National Park Service Rivers</u>, <u>Trails</u>, and <u>Conservation Assistance Program</u> to support the development of the Strategic Vision Framework. A second technical assistance grant was secured through this program to support the development of access planning, including Tribal access, on the proposed Stewart Mountain Community Forest. This grant does not provide any financial awards but provides staff support and technical assistance in support of community engagement for projects that meet their criteria.

# **Expenses**

# Forest Management Expenses:

A draft forest management plan has been prepared for SMCF Phase I. While general recommendations from this plan may be broadly transferable to Phase II parcels, a plan specific to Phase II will be required. Existing Parks resources are focused on the development of a forest management plan for Lake Whatcom properties. The principles of that plan could inform the development of a SMCF Phase II plan, as well as build a foundation of public engagement and understanding around active forest management and managing for forest and watershed health. Funding to support the development of a Phase II Forest Management Plan has not yet been secured. It is estimated that a Forest Management Plan for Phase II will be approximately \$100,000.

- Phase II acreage contains approximately 1,000 acres in need of pre-commercial thinning and brush control, which is estimated to cost \$640 per acre for a total expense of \$640,000 over 10 years.
- As described above under Revenue, Phase II contains approximately 800 acres available for harvest, and revenue generated during harvest will fully cover associated costs. It is estimated that starting in year 2 of the completed acquisition, annual harvest gross revenue will be up to \$100,000.

# Forest Road System and Maintenance Expenses:

• Existing road networks require maintenance, including regular grading and surfacing, ditch and culvert maintenance, and brush management. Parks has the same needs within its Lake Whatcom Watershed lands, which it is not currently meeting with its existing resources. Approximately 22 miles of roads exist within the Phase II acquisition area. Parks estimates

annual road maintenance expenses for a comparable road network at between \$25,000 and \$40,000 per year. Segments of roads may be abandoned after the completion of a forest management plan.

- Current development of the FMP for the Lake Whatcom Watershed is intended to examine
  the existing road network and develop recommendations that will inform future budgeting
  decisions. A similar effort will be required for newly acquired SMCF parcels.
- Future plans must address road maintenance needs to ensure compliance with forest practices standards, in addition to any road abandonment requirements. Funding for road abandonment, fish passage barrier improvements, and forest bridge replacement is regularly available to cost-share these efforts through the Department of Natural Resources and other sources. Information on financial assistance from DNR can be found here <a href="https://www.dnr.wa.gov/cost-share">https://www.dnr.wa.gov/cost-share</a>.

# Administrative Expenses

Depending upon the ownership and management structures pursued, the administrative cost of forest management, as well as grant procurement and management, will need to be considered. Some grants may allow for indirect billing to cover a portion of administrative costs. Otherwise, these expenses will need to be budgeted by the responsible parties.

# **Fiscal Analysis**

A preliminary fiscal analysis is included in the budget table below:

|  |  |   |  | One-time   |  |   |   |  |
|--|--|---|--|--|--|---|---|--|
|  |  |   | Expenses/  |  |  |   | Year 1-10   |  |
| Description/Source   |  | Year 0  | Revenues Year 1-10 (Total)   |  | (Annualized)   |   |   |  |
|  |  |   |  |  |  |   |   |  |
| 1,700 acres. Source: existing grants   | \$   | (8,800,000.00)  |  |  |  |   |   |  |
| 1,000 acres (\$640/acre)   |  |   |  |  | \$   | (640,000.00)  | \$  | (64,000.00)  |
| 32,500/mile, annual  |  |   |  |  | \$   | (715,000.00)  | \$  | (71,500.00)  |
|  |  |   | \$   | (100,000.00)   |  |   |   |  |
|  |  |   | \$   | (150,000.00)   |  |   |   |  |
| "10 miles of trail development (when?)                                       |  |   | \$   | (200,000.00)   |  |   |   |  |
| Annual management costs  |  |   |  |  |  |   |   |  |
| Annual management costs, includes  |  |   |  |  |  |   |   |  |
| FTE (weighted)   |  |   |  |  | \$   | (2,500,000.00)  | \$  | (250,000.00)   |
| Grant management, admin support  |  |   |  |  |  |   |   |  |
| ncludes .5 FTE   |  |   |  |  | \$   | (1,000,000.00)  | \$  | (100,000.00)   |
|  | \$   | (8,800,000.00)  | \$   | (450,000.00)   | \$   | (3,855,000.00)  | \$  | (385,500.00)   |
|  |  |   |  |  |  |   |   |  |
|  | \$   | 5,517,000.00  |  |  |  |   |   |  |
|  | \$   | 3,000,000.00  |  |  |  |   |   |  |
| 300 acres  |  |   | \$   | -  | \$   | 1,031,000.00  | \$  | 103,100.00   |
|  |  |   |  |  |  |   |   |  |
|  | \$   | 8,517,000.00  | \$   | -  | \$   | 1,031,000.00  | \$  | 103,100.00   |
|  |  |   |  |  |  |   |   |  |
|  | \$   | (283,000.00)  | \$   | (450,000.00)   | \$   | (2,824,000.00)  | \$  | (282,400.00)   |
|  |  |   |  |  |  |   |   |  |
|  |  |   |  |  |  |   |   |  |
| OE Combined Water Quality Funding \$500,000 annually (3 years), assume grant |  |   |  |  | \$500,000.00   | n/a   | a (3 year grant)  |  |
|  |  |   |  |  |  |   |   |  |
|  |  |   |  |  |  |   |   |  |
|  |  |   |  |  |  |   |   |  |
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Phase II Acquisition of 1,616 acres has an appraised value of \$8,800,000, of which \$8,517,000 is covered through grant funding. Additional funds are being raised by the Whatcom Land Trust

Numerous potential funding sources exist that could contribute to both forest and road management and are not included in these totals, and there is optimism that significant contributing funds can be secured to support the management of the site. Other community forests in Washington State have been successful in securing state grant funds as well as utilizing private and local funding sources where feasible. A comparable community forest project owned and managed by Chelan County has employed the following funding plan:

- no County funds used for maintenance
- initial fundraising effort secured funds available for use if needed
- Weyerhaueser Family Foundation grant to support pre-commercial thinning
- DNR Forest Resilience grant
- USFS Community Wildfire Defense grant, administered by DNR
- · Additional funding pursued by state grants to address access and recreational improvements

The County was able to manage the forest without the use of County funds to date and has not yet generated revenue from any timber harvest.

# Recreation:

# **Future Costs and Development Needs**

- 1. Recreational Trail Development:
  - Community forest lands offer opportunities for trail connectivity, including high-priority projects such as regional trail systems.
  - Capital investments will be required to realize trail-based benefits, and these projects will compete with other departmental priorities.

#### 2. Additional Trail Networks:

- Public demand for expanded trail systems across adjacent properties (e.g., potential loop trail connections between DNR's Olsen Creek trail development, Lake Whatcom Park, and SMCF) is expected to grow, adding pressure for coordinated development.
- Collaborative planning with partner organizations and community stakeholders is essential to balance these needs with existing commitments.

# **Staffing and Capacity**

Whatcom County currently faces fiscal and staffing constraints across the organization that require consideration of impacts to available resources and funding/staffing options that exist to support continuing and new projects. Both ownership options 1 and 2 will require County staff involvement, though co-ownership with the Nooksack Indian Tribe will require the most staff involvement.

Public Works has and continues to support watershed enhancement acquisitions as priority projects are identified and as funding permits. Public Works also supports floodplain and flood mitigation acquisitions and supports large-scale natural resource and watershed planning through the WRIA 1 Watershed Management Board framework. Development of site-specific management plans for acquired properties is currently underway. However, there are no additional resources available for this effort.

Parks has limited capacity to manage additional properties in the short- to mid-term and currently lacks sufficient staffing, with a key Land Management Supervisor (LMS) position unfilled until at least mid-2025. This position is critical for forest management, recreational trail development, and land stewardship activities. Although this role is designed to support existing priorities, it does not include responsibilities for newly acquired community forest lands. Current management priorities for Parks are focused on existing park properties and trail systems. Parks is working to establish a functional Land Management Division but needs additional resources and partnerships to expand its capacity. If Parks were to take an active or primary role in the management of Stewart Mountain Community Forest (SMCF), additional resources would be required.

Additional staff support will be required from legal, finance, and other administrative staff.

# Legal Obligations

Each ownership option would determine institutional obligations. If co-ownership is recommended, then Whatcom County would have significant additional obligations, whereas if the subsidiary nonprofit is recommended, then the County would have reduced obligations.

Under the Nooksack Basin rule amendment (May 2020), Whatcom County is allowed to continue permitting exempt wells for private residential uses. Ecology identified a list of projects to offset the impacts associated with those exempt wells. Ecological forest management of Stewart Mountain forests is one of the identified projects to offset those impacts. The language present in the rule supporting documents indicates that these identified watershed enhancement projects should be implemented.

Under the co-ownership option, Whatcom County would hold significant legal obligations. Known obligations include:

- stewarding obligations recorded under grant-funded agreements, including watershed enhancements and management
- forest and site management contract stewardship
- sponsor for grant agreements, including management, funding, and execution of agreements
- complete acquisitions, including due diligence
- liability and risk associated with access, recreation, and natural hazards, including landslides and wildfire

Under the subsidiary non-profit option, Whatcom County would hold limited, if any, legal obligations. Known obligations include:

- participation on the governance board
- contributions to implementing watershed enhancement projects
- recreation planning, implementation, and management could be required

# **Known Risks**

## 1. Landslide Risks:

- Some areas of the proposed parcels have known hazard zones, including landslide and alluvial fan hazard areas, requiring mitigation strategies and associated costs. Improved forest management could mitigate or reduce hazards. The most significant hazard area is located on Jones Creek above the town of Acme.
- Long-term ecological forest management may mitigate or reduce risks of these slope stability issues, but will not eliminate them completely, and immediate investments may be necessary to protect surrounding properties (Jones Creek Berm was recently completed).

## 2. Unsanctioned Trail Development:

 Public ownership increases the risk of illegal trail construction, adding to the workload and liability for the County  Parks is already working to address a backlog of similar issues on Department-managed lands in the context of implementing the 2016 Lookout Mountain Forest Preserve and Lake Whatcom Park Recreational Trail plan and the work of the LMS position that has been created. The Department lacks resources to expand efforts to support SMCF.

#### 3. Public Access:

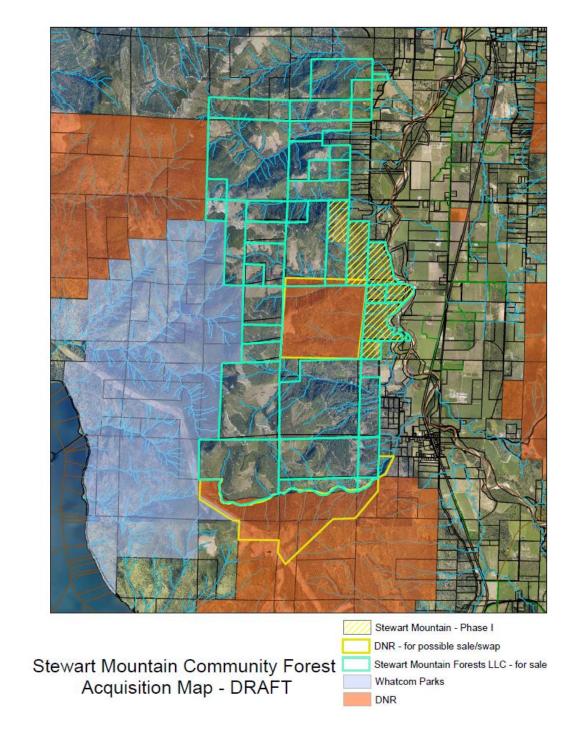
- With public access, additional risk exists, though RCW 4.24.210 reduces or removes liability from recreational users.
- The Nooksack Indian Tribe is interested in maintaining cultural use, including hunting, which will require additional planning and coordination.

#### 4. Wildfire Risk:

 Much of the proposed acreage requires pre-commercial thinning to improve forest health and reduce wildfire risk

# Conclusion

The acquisition of community forest lands, such as the SMCF, aligns with the County's long-term goals for watershed and ecosystem enhancements, improving climate resilience, preservation of resource lands, and enhancement of recreational opportunities. To successfully execute and manage this effort, significant planning, funding, and resource allocation challenges must be addressed. Collaborative partnerships, grant funding, and additional staffing will be critical to achieving these objectives without compromising current priorities.



**Figure 3.** The map above depicts Phase I in hatch marked yellow, with the green outlines depicting the full extent of the proposed Stewart Mountain Community Forest. County Parks ownership is shaded in light blue, and Department of Natural Resources ownership is shaded orange. This block of land would create a cohesive block of public land and would support enormous access, ecosystem, and forest management opportunities.

# Plans, Studies, & Regulations

Below is a list of adopted plans, scientific studies, and regulations that directly reference Stewart Mountain Community Forest and/or reference the role of forest management in streamflow enhancement and climate resilience. Each item below has a brief, italicized summarized point that supports the Stewart Mountain Community Forest.

# Watershed Function and Forest Management Study (2017)

This plan demonstrates that ecological forest management can improve streamflow and lower stream temperatures.

Susan Dickerson-Lange PhD of Natural Systems Design has completed her study of the role of forests and forest change in the uplands on watershed function, which contributes to downstream water quantity and quality. As part of the study, recommendations are offered for silvicultural and restoration actions that have potential to improve flows and lower temperatures. Here is a <a href="mailto:short PowerPoint">short PowerPoint</a> of her preliminary work, and her completed <a href="mailto:study and recommendations">study and recommendations</a>.

# The South Fork Nooksack River Reach-Scale Plan (2017)

This plan identifies priority ecosystems for protection, which identifies portions of the SMCF as being high value for protection and restoration.

The Reach-Scale Plan provides information for the protection and restoration of the riparian zone of the in agricultural areas. The plan contains 1) a description of the geographical setting of the SFNR watershed, 2) legacy impacts, 3) impacts of projected climate change on aquatic resources, 4) an inventory of riparian areas and their condition along the river, 5) opportunities for riparian protection and restoration, and 6) identification of land areas (while maintaining confidentiality) that may qualify for funding for protection and restoration activities on lands along the river and/or its tributaries.

# The Nooksack Indian Tribe Climate Change Vulnerability Assessment (2017)

This assessment identified vulnerabilities of forested ecosystems to climate impacts and climate migration needs for priority plants and animals.

Climate change will have profound impacts on the watershed's plants, animals, and ecosystems. Understanding which species and habitats are expected to be vulnerable to climate change is a critical first step toward identifying strategies and actions to ensure their survival in the 21st century. The University of Washington Climate Impacts Group worked collaboratively with the Nooksack Indian Tribe's Natural & Cultural Resource Department and other community partners to evaluate the climate change vulnerability of priority species and habitats.

**South Fork Nooksack River Watershed Conservation Plan** (2017)

A community-informed plan identifying key actions, including ecological forest management, to improve watershed health in the South Fork Nooksack watershed.

The <u>Watershed Conservation Plan</u> provides a well-researched and thoughtful contribution to the larger WRIA 1 Watershed Planning effort to protect and restore water quantity, water quality, instream flows, and fish habitat, with an emphasis on climate change resilience. Led by the Nooksack Indian Tribe Natural Resources Department, and developed through extensive community outreach, education, and involvement, the plan recommends nine priorities for voluntary action, grounded in the experience and values of the people who live and work in this community.

# WRIA 1 ESSB 6091 Technical Consultant RH2 Technical Memorandum (2018)

Ecological forest management of Stewart Mountain is one of the identified actions to offset exempt well impacts also providing net ecological benefit.

Washington State has a new streamflow restoration law in response to the Hirst decision. RH2 worked with the WRIA 1 Watershed Staff Team and WRIA 1 Planning Unit to identify a range of projects and actions that are intended to offset the estimated new consumptive domestic well water use over the next 20 years in WRIA 1 and provide net ecological benefit. Stewart Mountain is Project #21.

Amendment to Chapter 173-501 WAC Instream Resources Protection Program – Nooksack Water Resource Inventory Area (WRIA) 1 and its Final Rule Supporting Document (2020)

Ecological forest management of Stewart Mountain is one of the rule-identified actions to offset exempt well impacts. While implementation is not required, this action provides net ecological benefit and offset to exempt well impact is expected through action implementation.

The 'Hirst Fix' was adopted by the State Legislature allowing permit exempt well development to proceed so long as streamflow restoration projects were implemented – the WRIA 1 Watershed Staff Team recommended a long list of projects and Ecology selected a 'shortlist' of projects to provide the offset to the permit exempt well impacts and Stewart Mountain is project #21 on the list (see Section 6 – Projects and Actions) and provides the largest benefit to streamflow from the list of adopted projects.

# **Nooksack Indian Tribe Climate Change Adaptation Plan** (2020)

The Plan identified numerous actions that recommend the implementation of ecological forest management to support climate resilience and climate migration for priority plants and animals.

The Nooksack Indian Tribe Climate Change Adaptation Plan for Key Species and Habitats assesses climate change vulnerability of 19 species and 6 habitat types, and identifies ways to increase the climate resilience of priority natural and cultural resources in the Nooksack River watershed. All of western Washington is projected to warm rapidly throughout the 21st century. Increasing temperatures are projected across all seasons, with the greatest warming occurring during the summer, with heavy precipitation events projected to increase in frequency and magnitude.

South Fork Nooksack River Temperature Total Maximum Daily Load – Water Quality Improvement Report and Implementation Plan (2020)

The South Fork Nooksack River has regulatory exceedances for both temperature and sediment and ecological forest management has been identified as an implementation action.

The purpose of the <u>TMDL Plan</u> is to address temperature problems in the South Fork Nooksack River Watershed (SFNR) so that water quality is improved and designated uses are restored and protected. See also the <u>presentation</u> from the WA Dept of Ecology at the forum hosted in 2019 by the South Fork Watershed Education Committee which was very informative.

WRIA 1 – Regional Water Supply Plan (RWSP) Phase 1– Task 3, Water Supply and Management Solutions (2021)

Ecological forest management of Stewart Mountain was the top ranked project to increase streamflow in the priority basins.

The Regional Water Supply Plan was developed to establish a framework and identify solutions to address water supply needs for instream and out-of-stream uses. Stewart Mountain was the highest ranked project identified during this effort, contributing the most to improved late summer stream flows (see page 58).

## **Whatcom County Climate Action Plan (2021)**

Implementation of ecological forest management of Stewart Mountain will improve climate resilience.

The Forestry Chapter of the Climate Action Plan begins on page 128 and highlights a variety of ways that implementing resilient and climate smart forest management achieve our climate goals, including carbon sequestration, watershed improvement, wildfire risk reduction, and many other co-benefits.

<u>Interlocal Agreement with Western Washington University</u> to assess impacts of forest cover on peak flows (2023)

Ecological forest management can mitigate impacts of high flow events.

This project includes modeling the historical and projected future hydrology in the Nooksack River with a focus on forest cover impacts in winter peak flows. Hydrologic modeling will employ the Distributed Hydrology Soil Vegetation Model (DHSVM), which uses physical characteristics of the basin and meteorological inputs to simulate snow accumulation and melt, evapotranspiration, soil moisture storage, and runoff. The project will expand upon current DHSVM modeling projects in the Nooksack River in which the WWU research group is involved, including assessing projected peak flows based on the 2016 NOAA landcover and examining forest harvest scenarios in the South Fork of the Nooksack River watershed. Final project report to be completed in July 2025.

# **WRIA 1 Watershed Management Project (ongoing)**

The Project supports implementation of watershed restoration including ecological forest management to restore watershed health and support salmon recovery.

The <u>WRIA 1 Project</u> is a County-wide coordinated effort to address water quality, instream flows, and fish habitat. WRIA strategies integrate traditional resource-based culture, local ecosystem priorities, valued ecosystem goods and services, community economic vitality, and support regional <u>Puget Sound recovery goals</u>. Whatcom County is the lead entity supporting implementation of the adopted WRIA 1 Watershed Management Plan and its associated strategies and actions.