



# Starrigavan Watershed Stewards Project

*Restoring ecosystems  
Providing for our community*

*Creating jobs  
Educating youth*

## Summary

In the Spring of 2011, the Sitka Conservation Society, in partnership with the Tongass National Forest Sitka Ranger District, completed the restoration of wildlife habitat on 5.2 acres of young-growth forests in the Starrigavan Watershed and implemented a long-term citizen-based monitoring project.

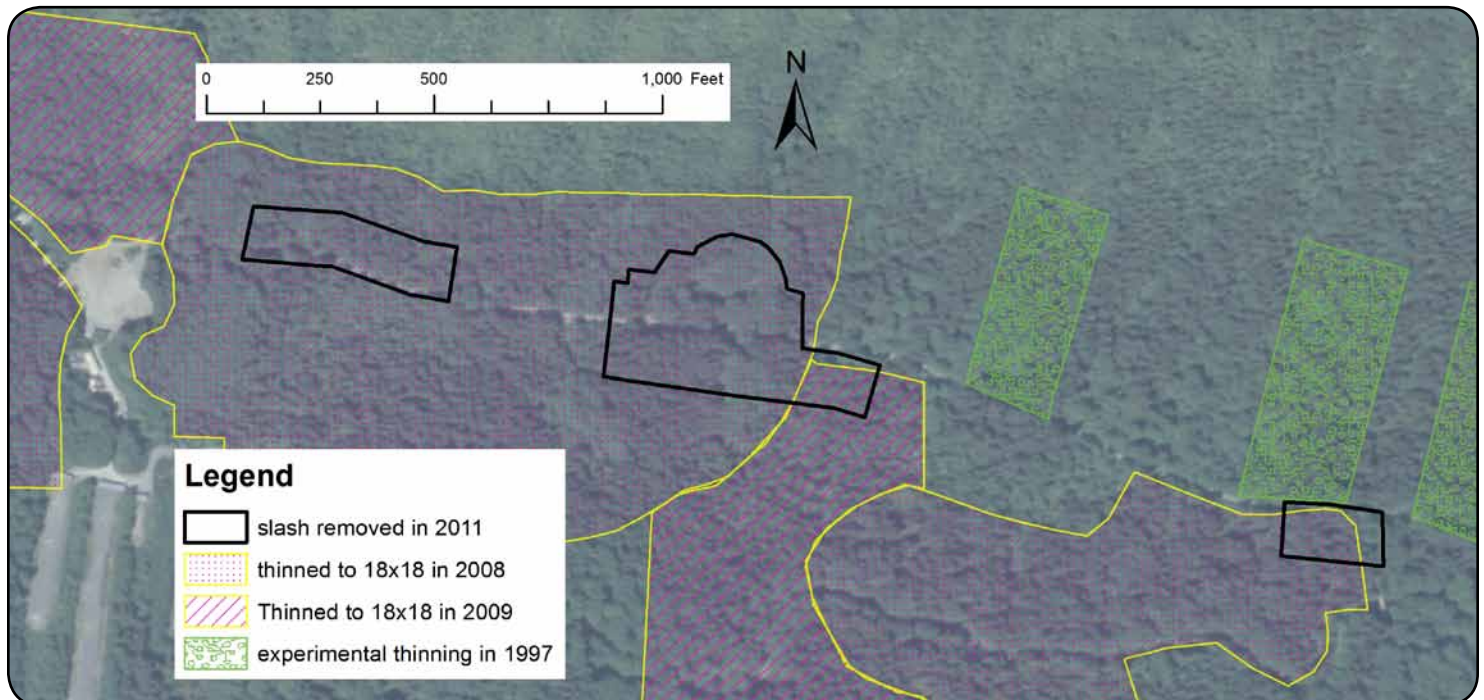
Clearcut timber harvests between 1968 and 1974 removed approximately 1/3 of the old-growth habitat in this valley. Many of the resulting young-growth forests have been pre-commercially thinned. This restoration project occurred in forests that were thinned in 2008 and 2009 with funding from the USFS Tongass National Forest and Trout Unlimited. For this project, the downed trees left over from those earlier thinning operations, often called “slash”, were removed from the forest. The multiple benefits of this project demonstrate how the goals of restoration and community development can go hand-in-hand.

## Objectives

1. Restore wildlife habitat
2. Provide a community source of firewood
3. Create restoration jobs
4. Involve youth in long-term watershed stewardship

## Some numbers

- 5.2 acres restored
- 83 cords of firewood
- 68 families cut firewood
- \$1540/acre for slash removal
- \$350/acre (approx.) for thinning\*
- 3 local restoration jobs
- 16 students involved
- 2 fenced deer exclosures



*Above: The slash removal project area in the Starrigavan Watershed.*

*\* The thinning was conducted under the separate Trout Unlimited / USFS project. The costs are included here to provide additional information.*

## Result - Restoring ecosystems

Typically, thinning operations leave large piles of slash. In Starrigavan, some slash piles were up to 2 meters high. A primary objective of this project was to remove the large downed trees in order to increase light to the forest floor and improve the ability of wildlife to move through the forest. Increased light to the forest floor should promote the re-establishment of winter forage plants for Sitka Black-tailed deer, a desired result that will be monitored. Trees greater than 10 feet long and 4 inches in diameter were removed. The following series of photos show how large slash piles were removed during this project, exposing the forest floor and greatly improving the ability, at least for humans, to travel through the forest.



*Above: Series of photos showing the reduction in slash piles before and after treatment.*

## Result - Providing firewood

This project benefited the community by providing a low-cost, non-oil based energy source for locals. Sitka relies primarily on hydro-electric power. Diesel generators supplement this power source when lake levels are low or when demand exceeds supply. Heating homes with wood directly replaces the need to burn oil - benefiting the environment and the wallet.

Approximately 125 trees per acre were removed from the forest floor to a nearby staging area, where 68 Sitka families and individuals cut firewood for their homes. Based on counting trees removed and individual truckloads, we estimated the project provided 16 cords per treated acre.

*Below: Local logger Brian Mork setting the choker.*



*Above and below: Locals cutting firewood at the staging area.*



## Result - Creating restoration jobs

After a competitive bidding process, we contracted with local logger Harry Green and his crew. They worked 22 days on site. This work was the first completed road-based slash removal project on the Tongass. Therefore, lessons were learned by everyone involved - the contractor, the agencies, and Sitka Conservation Society. We will continue to monitor the restoration results of this project. As the Tongass transitions to forest management based on restoration, young growth, and salmon, and if the monitoring results are positive, this restoration technique may be utilized more often. Therefore, the local contractor is learning important restoration skills that can apply to future projects.

*Left: Local logger Harry Green modified his loader by welding a winch to the bucket to cable trees out of the forest. The loader never left the road.*



## Result - Educating youth

The Sitka High School Field Sciences Class started a long-term study of the effects of thinning and slash removal on the restoration of wildlife habitat. This year, 16 students helped collect baseline data and installed 2 deer exclosures in the project area. The deer exclosures will help us to understand the effect of deer browse on plant regrowth.

These efforts fill a critical need to understand the effects of restoration activities. Information from this and other monitoring studies will help to constantly refine restoration techniques.

In addition to informing future restoration efforts, this project gets students outdoors and taking part in caring for our natural environment. This project will inspire the next generation of watershed stewards and land management professionals. Each year, the new cohort of students will revisit these sites to collect and analyze vegetation, wildlife use, tree growth, and other data.



*Above: Students building the deer exclosure.*



*Above: Watershed stewards on a Starrigavan field site visit.*



*Above: Tongass National Forest staff discussing the project in the classroom.*

This project was funded by the National Forest Foundation and Sitka Conservation Society, with additional support from the USFS Sitka Ranger District and the Alaska Department of Natural Resources.



*For more information, contact:  
Scott Harris  
Watershed Stewards Project Manager  
scott@sitkawild.org*

