Biennial monitoring and evaluation snapshot
Gifford Pinchot National Forest
2018

Are we meeting our goals?

Challenges for Gifford Pinchot National Forest staff from 2016-2018 included an ongoing recreation boom putting pressure on trails, natural areas, and waterways; historic drought conditions across the entire region; winter and spring storms causing extensive road damage; and a "new normal" of wildfire risk. In response, we continued to explore creative options and community-based solutions that enable us to successfully maintain and protect the valuable natural resources, recreational opportunities, and heritage sites treasured by the public.

- Conditions in **riparian zones** showed broad positive changes, greater than the rate of improvement in the rest of the region.
- We **improved over 8 miles of fish habitat** and removed four fish barrier culverts.
- Unmanaged dispersed camping is encroaching on lakeshores and meadows.
- We face challenges in maintaining and replacing failing trail bridges.
- New **invasive plants** are being detected and successfully treated. We are currently treating 2,422 acres a year.
- **Mountain goat** herds are increasing,

Recommended changes—No changes to the forest plan are recommended. Minor adjustments to three monitoring questions are recommended. Minor changes suggested for management activities include improving data management, increasing the pace of fish barrier removal, and developing individual plans for timber harvest sites.

Summary of monitoring results

Watershed conditions

During projects such as timber sales and trail maintenance, we successfully applied mitigation measures to protect the scenic quality of the Upper White Salmon, Cispus, and Clear Fork Cowlitz rivers.

Our monitoring showed broad improvement (at a rate four times greater than the rest of the region) in upslope and riparian conditions. Road indicators showed positive changes for several monitored watersheds.

Aquatic habitat

From 2014-2017, we improved over 8 miles of fish habitat through reconstructing channels and increasing large wood in streams. We replaced four fish barrier culverts, reopening 2.2 miles of habitat to fish.

In 2014-2015 we decommissioned 7.5 miles of road, and stabilized an additional 12.1 miles of road.

Management effects on productivity of the land

As of 2012, soil compaction and displacement were found in 2 to 2.7 percent of units 1 and 10. Treatment to restore soil compaction improved soil infiltration on temporary roads. Our monitoring suggested that only minor adjustments are needed to improve soil best management practice implementation.

Climate change

Monitoring revealed that stream temperature in most creeks is correlated to April 1 snowpack levels. Overall, there is a measurable relationship between annual snowpack and stream temperature, but it's noisy.

None of the creeks we monitored had a statistically significant upward or downward trend in average temperature from 1997-2017. Snowpack varies widely from year to year. From 1979-2018, there was no statistically significant trend in annual snowpack at the Lone Pine Snotel.

Progress toward desired conditions

Invasive plants. Although the number of treated acres has declined over the last 10 years, we are detecting new invasive plants and treating them through early detection and rapid response. We currently treat 2,422 acres a year.

Mountain goat habitat. We are not currently actively managing mountain goat habitat for forage. However, mountain goat herds are increasing and we are meeting our objectives.

Resource outputs. We are still offering and awarding less than the volume of forest products outlined in the Northwest Forest Plan.

Road maintenance. There are 1,299 miles of road prescribed for closure. We are at about 80 percent of our goal, with 985 miles of road closed. Current budget levels are inadequate to meet our road maintenance needs.

Recreation and visitor satisfaction

Our trail maintenance work improved safety without negatively affecting the character of semi-primitive areas.

With volunteers and partners performing over half of the 2012 trail maintenance, good progress was made toward building capacity to maintain our trail system. However, we face challenges in maintaining and replacing failing trail bridges forest-wide.