

## Maintaining Water Quality on PotlatchDeltic Timberlands

Forests play a crucial role in collecting and filtering the water that countless organisms depend on—including humans. In our planting, harvesting, and road-building, we take comprehensive measures to reduce sedimentation, with the goal of protecting the riparian ecosystem. We follow the states' prescribed “best management practices” as well as our own procedures that have been refined and improved over decades of careful research-science based forestry.

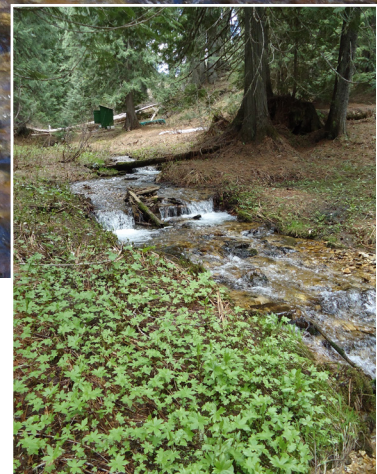


### Measuring Water Quality at Mica Creek

Following passage of the Clean Water Act in 1977, many states adopted forest management guidelines intended to reduce forestry's negative effects on watersheds. But at the time, there was little research showing whether these new guidelines actually worked. That's why PotlatchDeltic undertook a landmark study that was the first of its kind among U.S. forest products companies and remains the most comprehensive in scope and findings.

In 1990, with help from the U.S. Forest Service and the Idaho Department of Lands, we established the Mica Creek Experimental Watershed—an area southeast of Coeur d'Alene, Idaho, comprising the 2,700-hectare (6,672 acres) catchments of Mica Creek, a tributary of the St. Joe River. While the watershed has been the site of numerous research projects over the years, we created this “living laboratory” for one main reason: to conduct a 15-year study of the effects of modern forest management “best practices” on stream quality.

Over the course of the study, we have worked with scientists from the University of Idaho, NCASI and other academic institutions to collect data on the effects of tree harvesting, road building, and other practices. The results of that research are published in independent, peer-reviewed academic journals and presented at scientific conferences.





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While some data are still being analyzed, the conclusions to date are encouraging. They show that forest management that adheres to established best practices has little to no adverse effect on streams. Among the specific findings:

- Stream flows generally increase after tree harvests
- Stream temperatures in fish-bearing streams just downstream of harvest sites increase very slightly in the spring and decrease very slightly in the summer
- Measurable suspended sediment increases immediately in the first spring following a thinning or harvesting, then returns to pre-harvest levels
- Forest management that adheres to contemporary best practices had a positive impact on fish and no measurable effect on amphibians, or aquatic insect communities

The initial study is now complete and the Mica Creek Experimental Watershed will once again become part of our “working forest”—the forestlands that we regularly harvest and replant. We will continue to collect data on water flow, sedimentation, and other key measurements in the watershed to provide on-going evaluation of our forest practices. For more information about Mica Creek, please visit <https://www.uidaho.edu/cnr/research/stories/mica>.