These days, it's tough being a salmon on the west coast. Faced with a wide range of challenges including habitat loss, drought and climate change, nearly all of California's salmon and steelhead populations have been listed under the state and Federal Endangered Species Acts.

In Northern California's Russian River watershed, the yearly return of coho salmon had become so small that in 2004, the Russian River Coho Salmon Captive Broodstock Program began releasing juvenile coho into tributaries with the goal of reestablishing populations facing local extinction. Since the first releases, California Sea Grant has been on the ground leading monitoring efforts to keep an eye on these fish.

California Sea Grant Extension Specialist Mariska Obedzinski and her team document survival and outmigration of juveniles and returns of adult fish through downstream trapping in the spring, snorkel surveys in the summer and spawner surveys in the winter. They're also using innovative technology known as Passive Integrated Transponder (PIT) tags to identify and track individual fish from their release as juveniles to their return as adults.

By tracking the success of the hatchery releases as well as better understanding the environmental factors that may be preventing recovery of the species, California Sea Grant is helping the Broodstock Program manage future releases and ensure the future of California's salmon populations.

Read more about California Sea Grant's ongoing Russian River monitoring program.
Image description: Five photos (Photo credit: Joshua Asel, unless otherwise noted), from left: Biologist Sarah Nossaman-Pierce takes a dissolved oxygen measurement as part of a salmon flow and survival study; biologists scan a coho salmon smolt for presence of a Passive Integrated Transponder (PIT) tag (credit: Caitlin Coomber); fisheries technician Jeff Rosemond measures the dimensions of salmon redd (nest) during a winter spawner survey; a juvenile coho salmon (credit: Nick Bauer); and biologists Nick Bauer and Andrew McClary observe an adult Pacific lamprey.

Have an idea for a postcard? Share your program's work with Sea Grant! Submit your ideas for a Postcard from the Field.