

### The Freshwater Trust

Nonprofit organization with more than 30 years of experience protecting and restoring America's freshwater.



### **Habitat Restoration**

Actively restoring stream, off-channel and riparian habitats to improve functional conditions for fish.

### Flow Restoration

Keeping water in streams to support water quality and habitat while supporting working lands.

### Water Quality Trading

Applying compliance-driven funding to prioritized restoration/conservation actions to increase overall watershed health.

## The Challenge:

### Resiliency for California's Fish and Wildlife

What is resiliency in the face of uncertainty? Is it:

- Finding new 'stability' from disturbance in different environmental conditions, by providing many options for protecting and creating habitats over large gradients?
- Protecting the flows of energy and plants and animals through stream networks?
- What else?

Given the uncertainty, what do we do to protect our natural resources?

Low risk, high-impact solutions:

- 1. **Think bigger**, apply habitat improvements at scale: square miles, not acres; rivers, not reaches.
- 2. **Think faster**, continuously assess what improvements are working and what thinking/tools/technologies can leverage more success.
- 3. *Think together*, agencies using their individual strengths, finding and filling gaps, partnering with communities, industry, and NGO's.



## TFT's Focus on resiliency

Taking lessons learned in Oregon and Idaho: working with agriculture and communities, and using technologies that pinpoint the most important and effective places to invest in conservation.

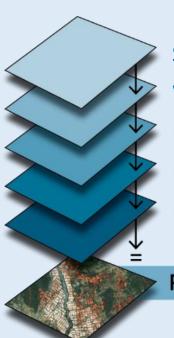
In Oregon, TFT is restoring multiple watersheds and has improved conditions in more than 50 stream and rivers.

In Idaho, TFT is restoring more than 100 miles of the Middle Snake River and has helped to implement over 1,000 acres of agricultural BMPs.

In California, TFT is currently working in the Northern Central Valley, the Russian River Watershed, and the Delta to leverage emerging technologies and identify creative, market-based strategies that create social, economic, and environmental benefits.



# **TFT Quantified conservation**



System inputs

Water rights data

**Ecological data** 

Land use/crop data

Economic data

**Priority Restoration Map** 



## Case Study – The Cosumnes

Existing refugia at high risk from climate change

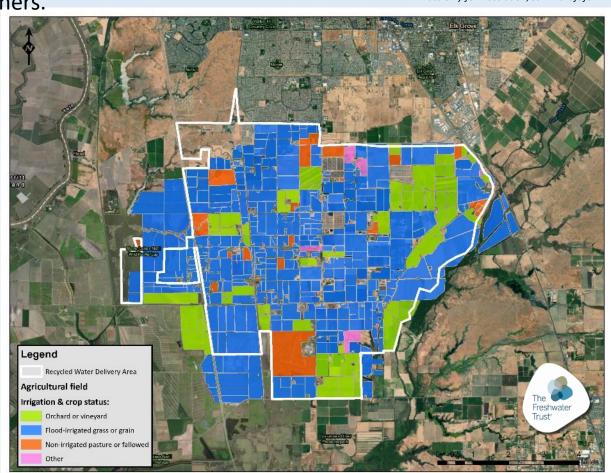
Lead Agency- Sacramento's Regional San; Proposition 1 funder, California Water Commission; DFW staff Kristal Davis-Fadtke; Micah Green, Attorney, Paige Uttley, Briana Seapy, and others.

Data only for illustration, still in draft form.

Taking a new requirement and solving 3 different challenges.

How? Focused on the success of working lands through voluntary agreements.

Leveraging the benefits beyond just acre-feet of water. Protecting multiple listed species and their needs in a natural and working lands context. Partnering with state, and federal agencies, NGO's and agriculture.



## Questions?

