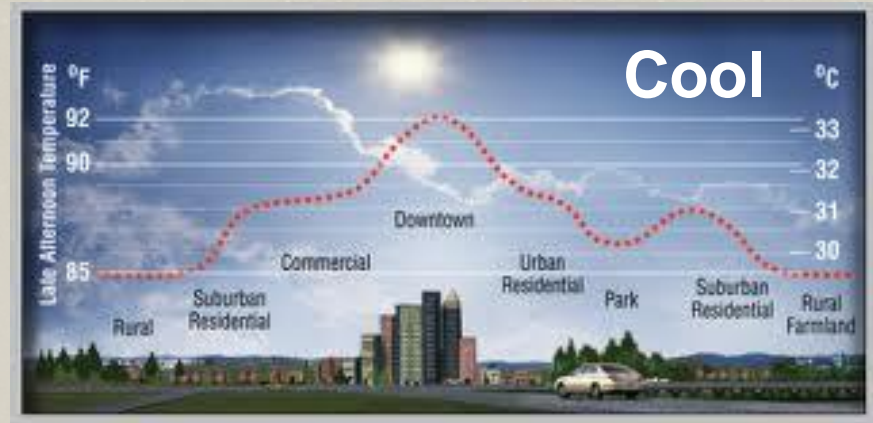# Designing Climate-Smart Conservation

Jad Daley
Martha Wyckoff Fellow
Director, Climate Conservation Program

THE TRUST *for* PUBLIC LAND

LAND FOR PEOPLE

Green Infrastructure for Climate-Smart Cities

THE TRUST FOR PUBLIC LAND – NEW YORK

HARBOR PROGRAM

Area of interest

New Jersey

New York

Greenpoint / Williamsburg

Idlewild

Bergen Street Garden

Spring Creek Park Preserve

Fresh Creek Park

Harbor Herons State WMA

HHSWMA (Flag)

HHSWMA (Slade)

HHSWMA (Lembo)

Graniteville Swamp

Graniteville Quarry Park

North Shore Waterfront Park

Upper New York Bay

Brooklyn

Buffer the Bay

Paerdegat Basin Park Preserve

Dubos Point Wildlife Sanctuary

Vernam Barbadoes Ferns Peninsula Preserve

Wilpon State Tidal Wetlands

Serpentine Art and Nature Commons I-III

Shooters Island

Old Place Creek State Tidal Wetlands (Sapers)

Teleport/Sweetbay Magnolia Preserve

Elbs Pond Park Preserve

Four Sparrow Marsh

Jamaica Bay

Old Place Creek State Tidal Wetlands (Berman)

Staten Island

Saw Mill Creek Marsh Preserve

Elbs Pond I-II

Lower New York Bay

Beach 88th

Brant's Point

Harbor Herons

Neck Creek/ Mezzacoppa

South Beach Wetlands

Bayswater Point State Park (Mott)

Bayswater Point State Park (Norton)

Isle of Meadows

St. Francis Woods

Pouch Camp II-III

Pouch Camp I

Decker Farm Conservation Easement

Latourette Park

Sharrotts Road Shorelands

Amboy I-II

Atlantic Ocean

North Mount Loretto

Great Kills

Long Pond Park Preserve

Mount Loretto State Unique Area

Butler Manor

0 1 2 Miles

The Trust for Public Land
- Project in progress
- Completed project
- Project in progress
- Completed project
- Parks and playgrounds
- TPL Recommended Land Transfer*
- TPL Greenprinting / Focus Area
- Hurricane Sandy surge zone
- Parks and open space
- Military land
- Airport

*TPL recommended land transfers to NYC Parks. These sites were recommended for protection by TPL Greenprints / Watershed Visions.
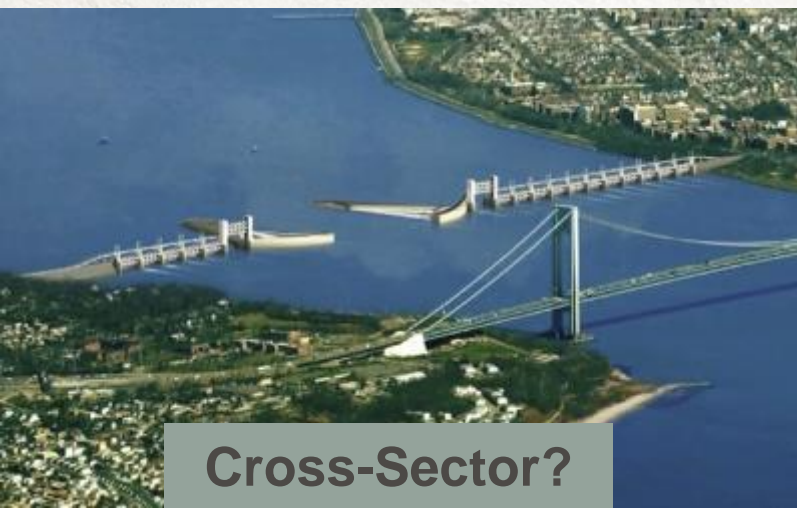
Siting?

Design?

Community Roles?

Climate-Smart Questions

Cross-Sector?

Public Policy?

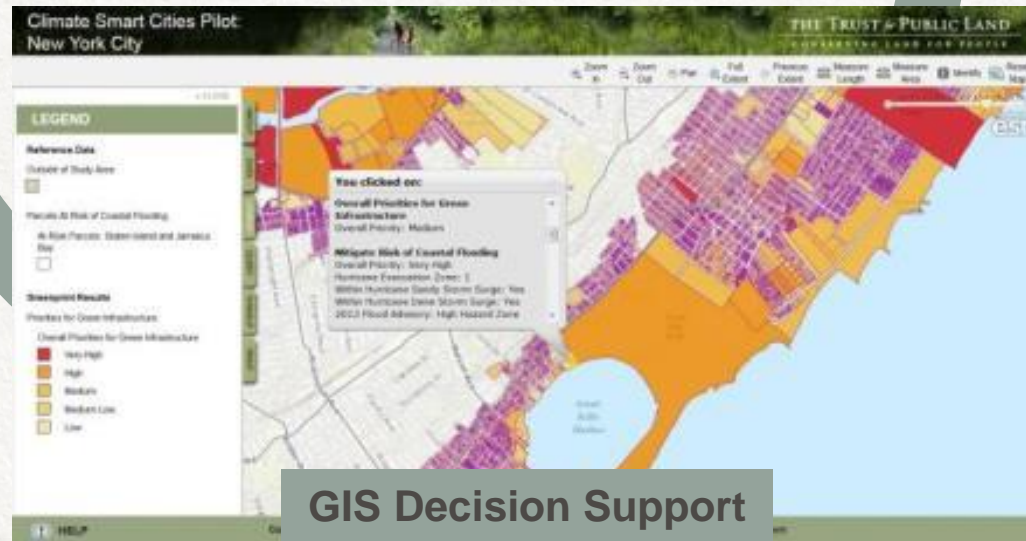# Climate-Smart Cities Model for Integration

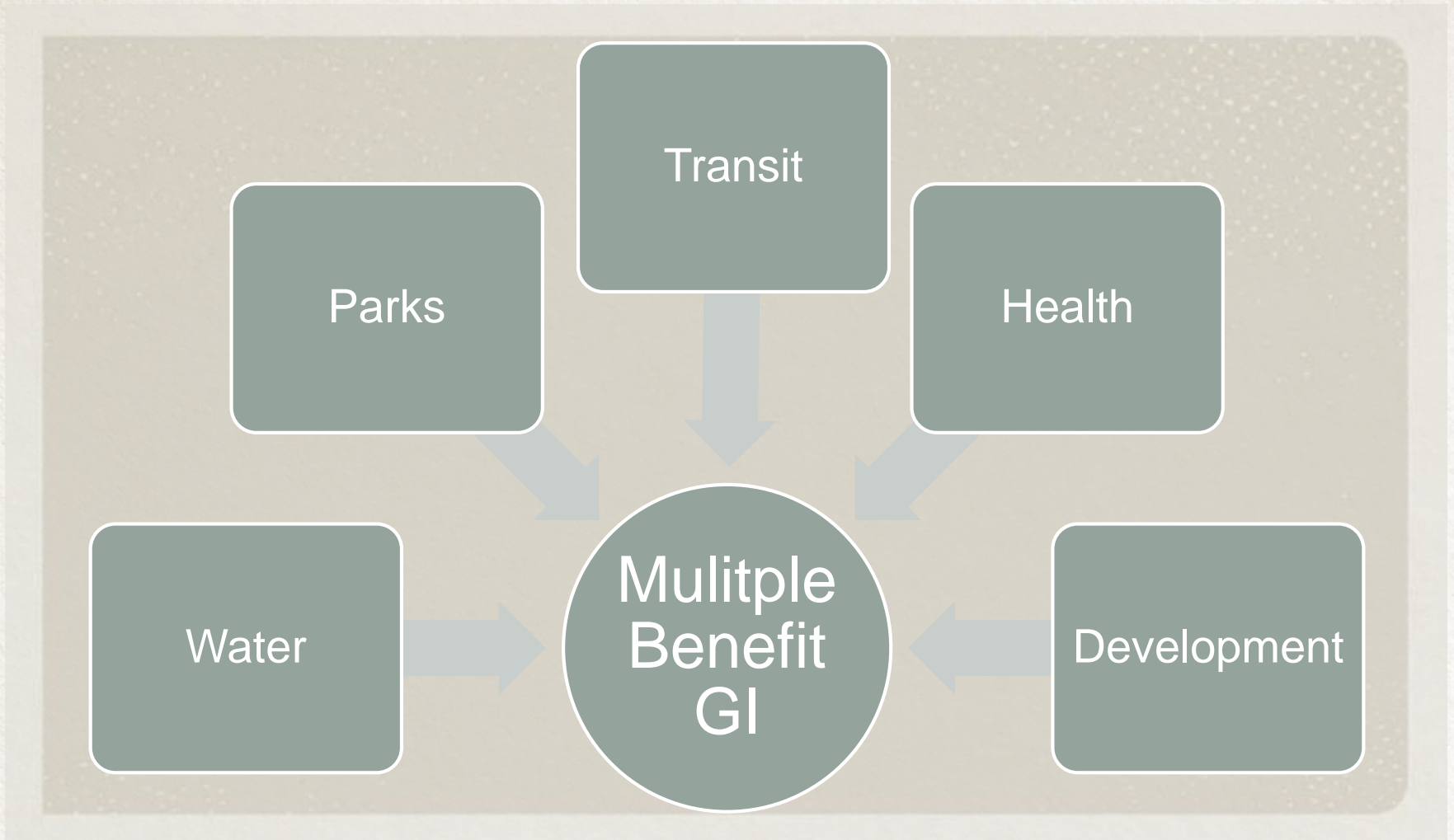**Climate-Smart City Partnership**

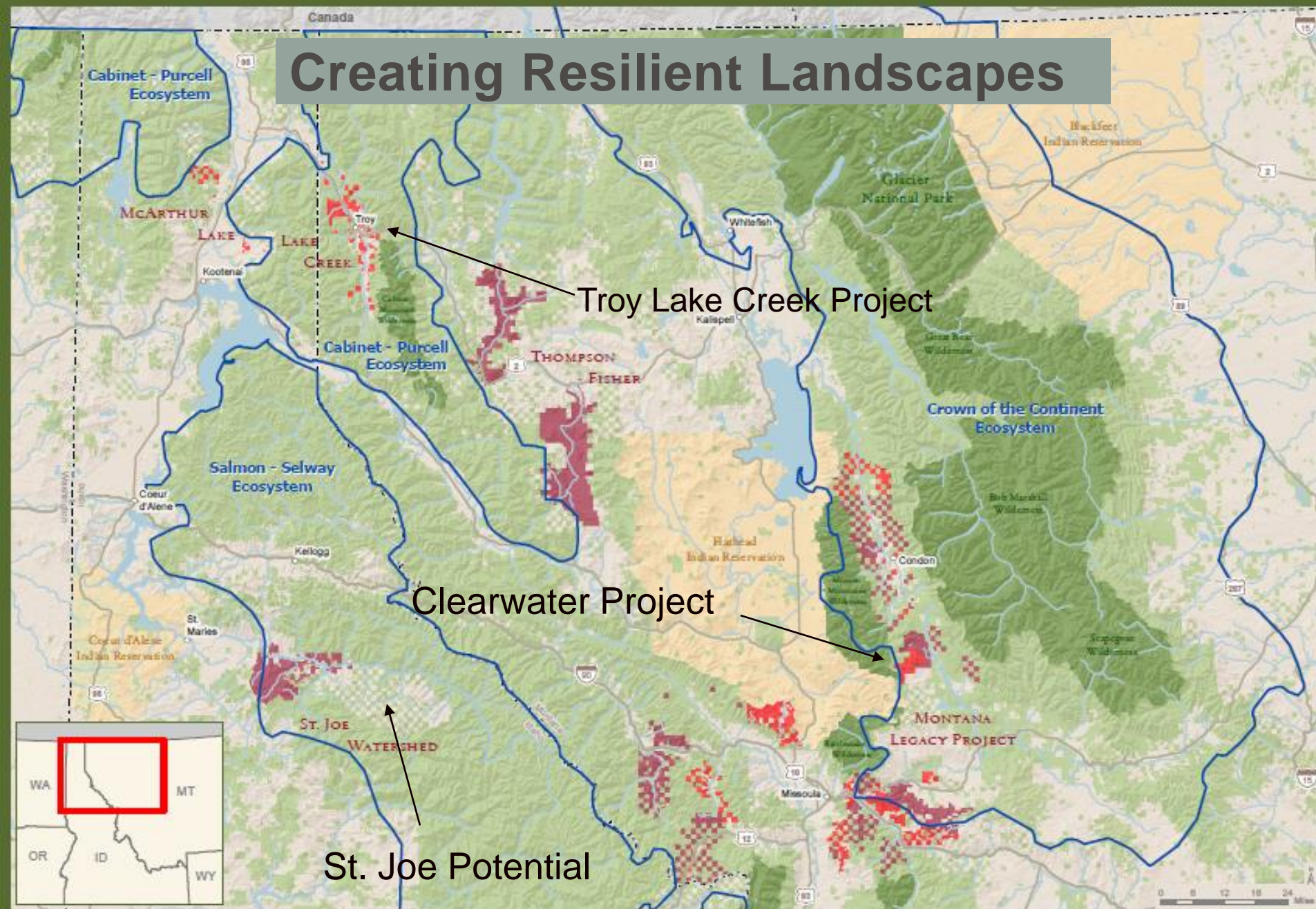**Demonstration**

Applied Research

GIS Decision Support

Opportunity: Help Cities Identify and Integrate Levers for Green Infrastructure

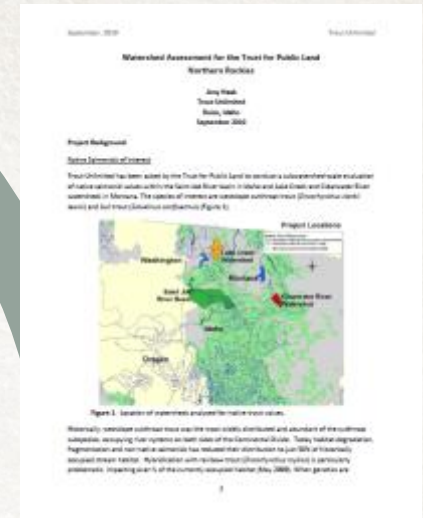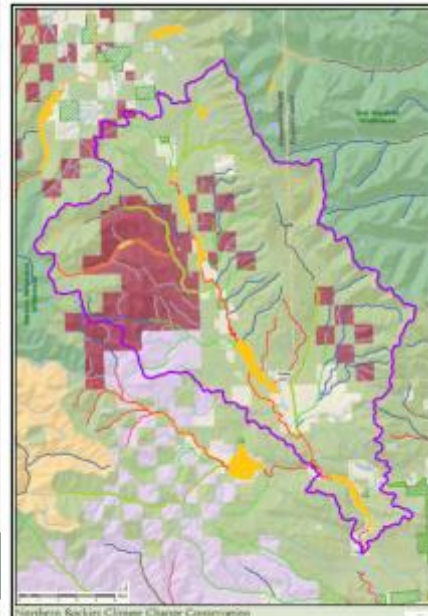NORTHERN ROCKIES LARGE LANDSCAPE CONSERVATION

Creating Resilient Landscapes

Troy Lake Creek Project

Clearwater Project

St. Joe Potential

Resilient Landscapes Model for Integration

Resilient Landscape Partnership

Demonstration

Applied Research

GIS Decision Support

Decision Support Must Go Deep on Science

Clearwater Conservation Can Impact Resilience
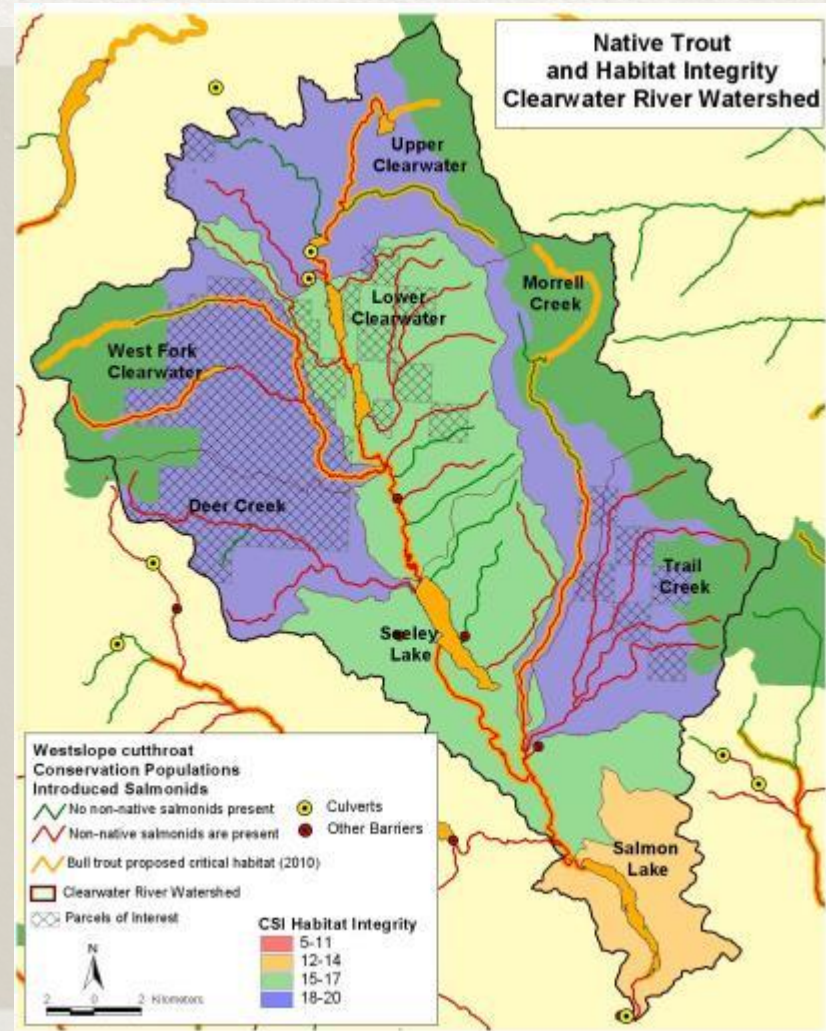
Protection from Development Is Not Enough

Trout Unlimited Climate Change Strategy

1. Protect diversity of remaining native populations.

2. Restore natural range of life history strategies.

3. Protect springs, headwaters and other sources of cold water.

4. Restore riparian habitats to provide shade.

5. Restore large woody debris and boulders in stream channels.

6. Remove in-stream barriers to fish movement.

7. Restore in-stream flows that have been reduced.

8. Minimize existing sources of stress, such as pollution, overgrazing, and roads.

9. Limit introductions of non-native fishes and control existing populations.

10. Monitor and evaluate habitats.

Using TU Science to Guide Clearwater Restoration

Native Trout and Habitat Integrity
Clearwater River Watershed
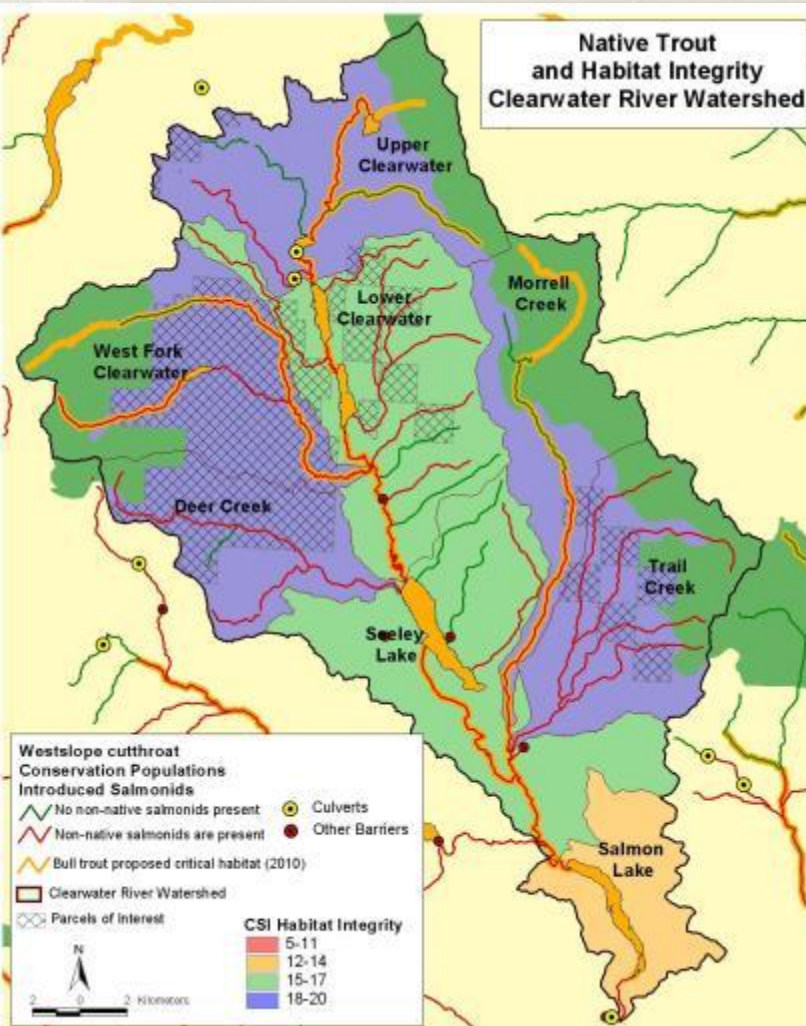
Restoration Priorities for Resilience

1. Emphasize West Fork and Deer Creek sub-watersheds

2. Restore healthy forest cover to reduce risk of winter flooding

3. Road decommissioning to restore connectivity and reduce sediment loading