



# **Straight to Implementation**



**A TMDL Alternative**



# Ecology's Livestock and Water Quality Program

## Objectives:

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- Achieve compliance with water quality standards
  - Improve relationships and build trust between Ecology and rural property owners



# When can this strategy work?

- Watersheds with all nonpoint sources
- Pollution problems are known
- Management practices to solve the problems are known
- Have dedicated staff
- Have funds for post-implementation monitoring
- Are willing to do enforcement



# Where are we implementing the program?

- Agriculture-dominated watersheds in eastern Washington
- Primarily livestock and dryland farming





# Watershed conditions

- Animals have unlimited access to streams
- Riparian areas trampled and overgrazed
- Streams listed for temperature, fecal coliform, pH, dissolved oxygen
- Streams provide spawning habitat for threatened runs of Snake River Steelhead

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# Challenges

- Agriculture community generally resistant to regulation
- Some Conservation Districts won't work with Ecology
- Installing miles of fence and other BMPs isn't cheap





# Our Assets

- 319 and state funds that can be used for nonpoint implementation
- Access to Washington Conservation Corps crews
- A tenacious and charming staff person





# What do we do?

Primary BMP is installation of riparian buffers because—

- Slow bank erosion
- Reduce flood damage and sedimentation
- Shade the stream
- Prevent sediment, nutrients, pesticides, pathogens from reaching stream
- Create fish and wildlife habitat
- Enhance summer stream flow





# What do we do?

- Buffers are minimum of 35 feet wide, planted with native shrubs and trees
- We provide cost share funding; landowners provide match in cash and/or labor and sign agreement to maintain fence and buffer
- We will also help pay for other BMPs **AFTER** cattle are completely excluded from riparian corridor



# What do we do?

Other BMPs we will fund include:

- Off-stream watering facilities
- Winter feeding areas with heavy-use protection
- Windbreaks
- Manure storage facilities

All of the above have funding limits





# How are we doing?

- Started the program in six watersheds
- So far have created 300 miles of riparian buffer
- Have issued two enforcement orders
- Addressing 47 listings for temperature, fecal coliform, DO, pH
- We are putting these listings into Category 4b on the 2008 assessment





# Before and after



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# Before and after





# Before and after





# Before and after






# After

- Complete exclusion from riparian area
- Winter feeding and watering moved away from riparian area







# **Straight to implementation will work if . . .**

- Watershed has all nonpoint sources
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