



United States Department of Agriculture

A photograph of a rugged mountain landscape. A large, snow-capped mountain peak dominates the background under a dramatic, cloudy sky. In the foreground, a rocky, dirt path winds up a grassy slope. The overall scene is serene and natural.

Small Watershed Program

Larry Johnson, P.E.

State Conservation Engineer, and
Small Watershed Program Manager

A photograph of rolling green hills under a clear blue sky. The hills are covered in lush green grass, and the perspective is from an elevated position, looking across the landscape.

Washington State
Natural Resources
Conservation
Service



Authorized by Public Law 566 (PL-566)

Natural
Resources
Conservation
Service

nrcs.usda.gov



United States Department of Agriculture

PL-566
Small Watershed
Program
“OVERVIEW”



Natural
Resources
Conservation
Service

nrcs.usda.gov



United States Department of Agriculture

Program Overview

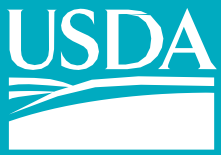
- USDA's Small Watershed Program provides for **cooperation** between the Federal government, states and their political subdivisions to **work together** to address needs.



Natural
Resources
Conservation
Service

nrcs.usda.gov





United States Department of Agriculture

Program Overview

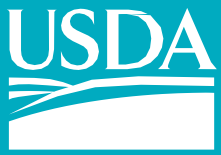
- Small watershed is defined at 250,000 acres (390 square miles).



Natural
Resources
Conservation
Service

nrcs.usda.gov





United States Department of Agriculture

Program Overview

- There are **two** types of watershed projects:



Natural
Resources
Conservation
Service

nrcs.usda.gov



Program Overview

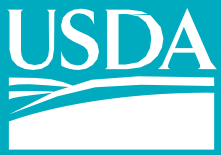
- Structural Watershed Projects (Public Land)
 - Project work including:
 - Flood Control (dams, levees, channels)
 - Agricultural Water Supply Structure (Reservoir)



Natural
Resources
Conservation
Service

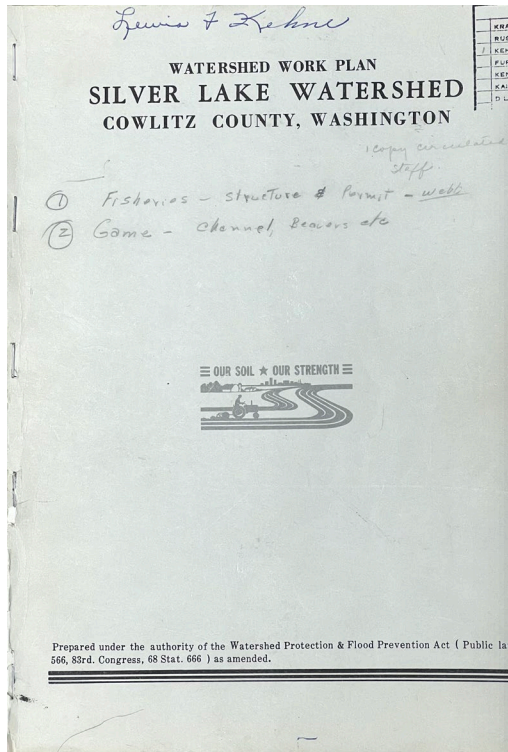
nrcs.usda.gov





Program Overview

- Silver Lake Flood Control Project (1966)



Natural
Resources
Conservation
Service

nrcs.usda.gov

Program Overview

- Land Treatment Watershed Projects (Private Land)
 - Conservation practices designed to control erosion and sedimentation or,
 - provide for the proper management of land, water, and natural resources.

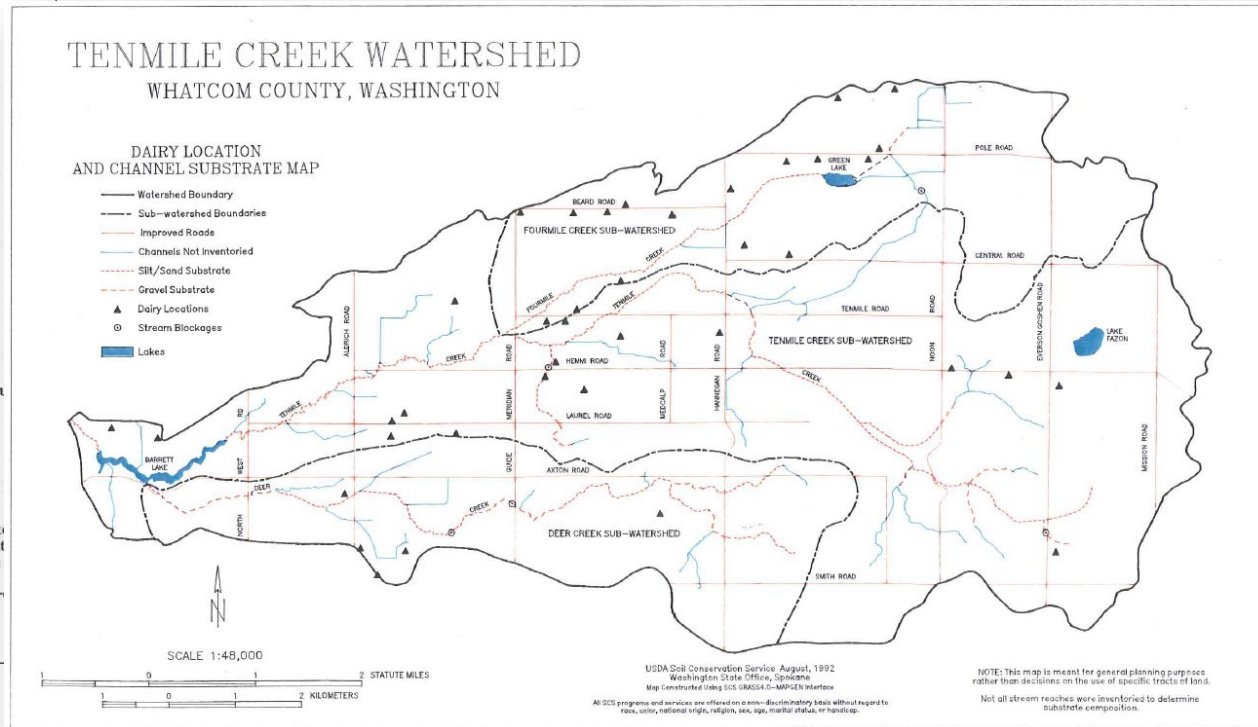
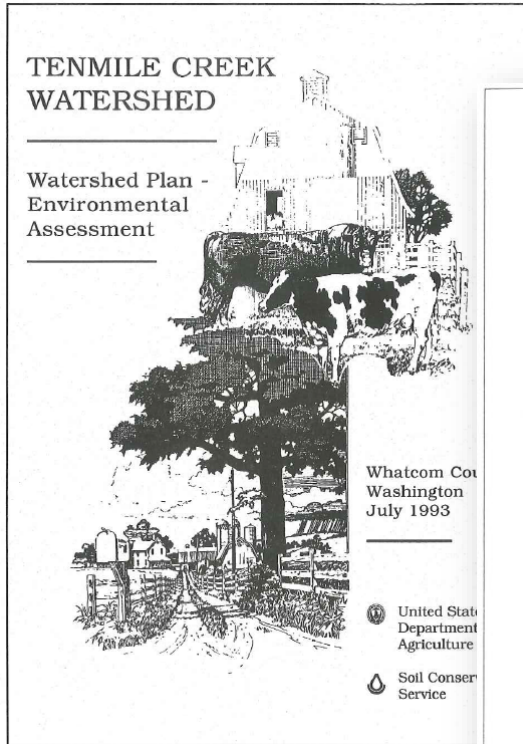


Natural
Resources
Conservation
Service

nrcs.usda.gov

Program Overview

- Tenmile Creek Watershed Project (1993)



Natural Resources Conservation Service

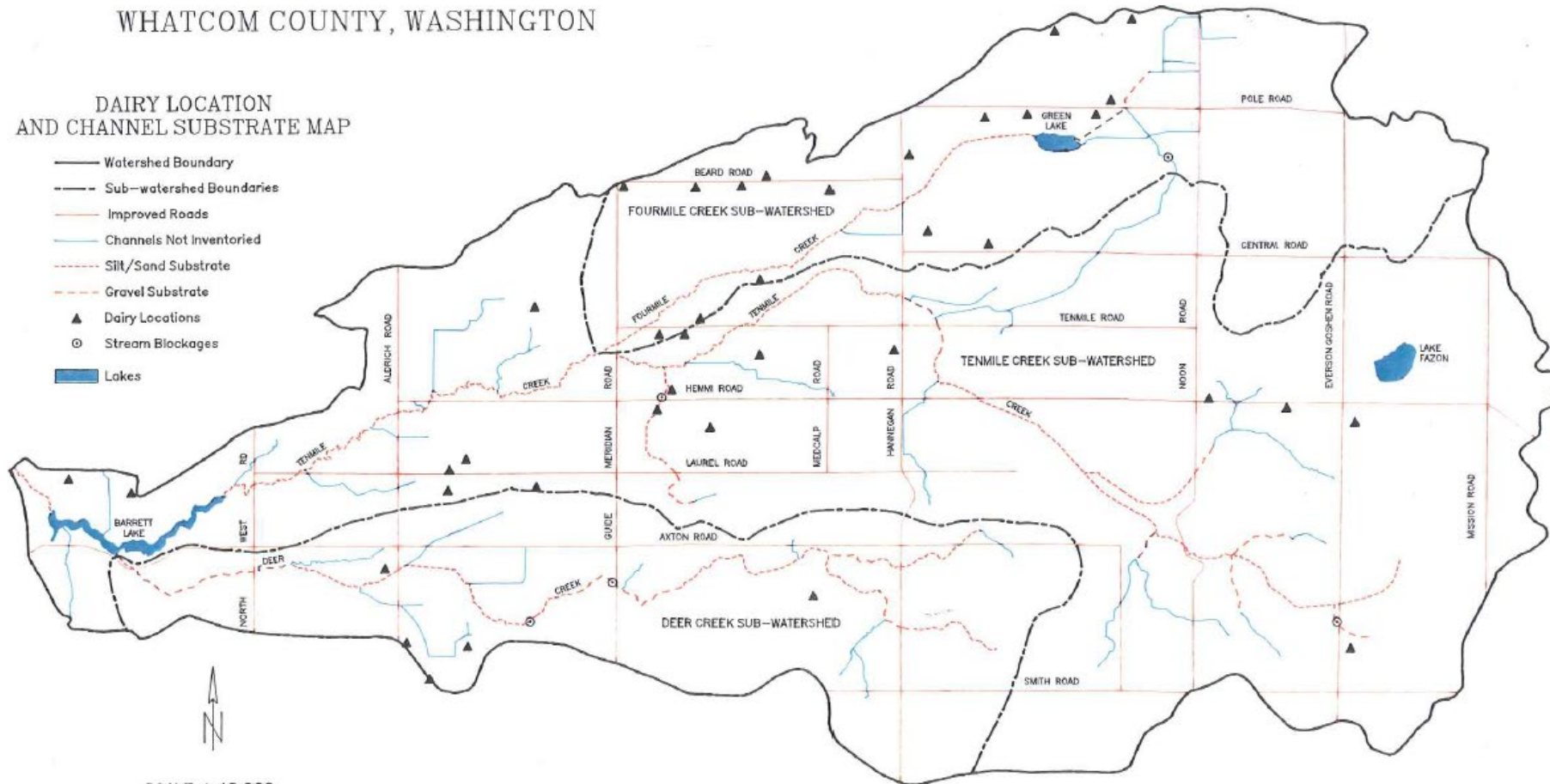
nrcs.usda.gov

TENMILE CREEK WATERSHED

WHATCOM COUNTY, WASHINGTON

DAIRY LOCATION AND CHANNEL SUBSTRATE MAP

- Watershed Boundary
- - - Sub-watershed Boundaries
- Improved Roads
- Channels Not Inventoried
- - - Silt/Sand Substrate
- - - Gravel Substrate
- ▲ Dairy Locations
- Stream Blockages
- Lakes



SCALE 1:48,000



USDA Soil Conservation Service August, 1992
 Washington State Office, Spokane
 Map Constructed Using SCS GRASS4.0-MAPGEN Interface

All SCS programs and services are offered on a non-discriminatory basis without regard to race, color, national origin, religion, sex, age, marital status, or handicap.

NOTE: This map is meant for general planning purposes rather than decisions on the use of specific tracts of land.

Not all stream reaches were inventoried to determine substrate composition.

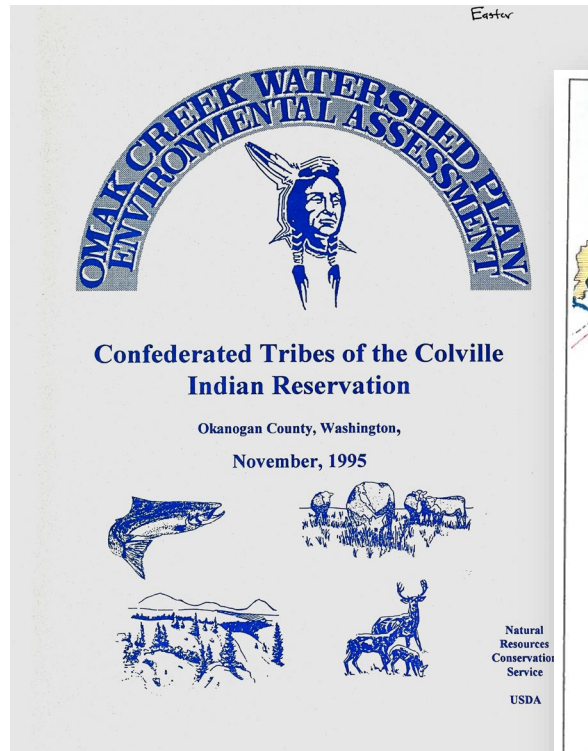


Natural Resources Conservation Service

nrcs.usda.gov

Program Overview

- Omak Creek Watershed Project (1995)



Natural Resources Conservation Service

nrcs.usda.gov

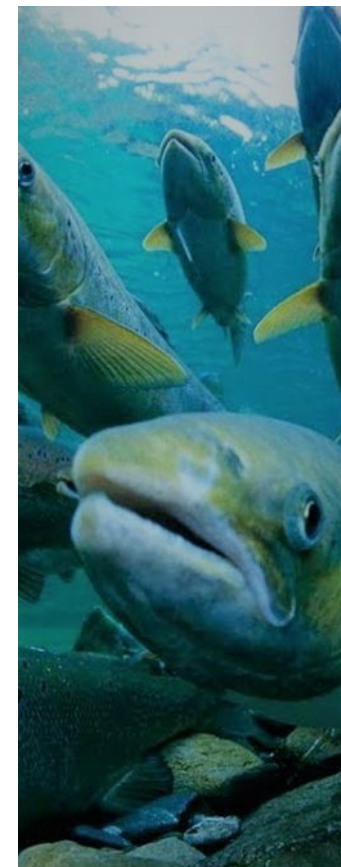


Natural Resources Conservation Service

nrcs.usda.gov

Program Overview

- USDA’s Natural Resources Conservation Service (NRCS) offers financial and technical assistance through the Small Watershed Program for variety of project purposes.
 - Flood Prevention
 - Watershed Protection
 - Public Recreation
 - Public Fish and Wildlife
 - Agricultural Water Management
 - Municipal & Industrial Water Supply
 - Water Quality Management
 - Groundwater Supply



Natural Resources Conservation Service

nrcs.usda.gov





United States Department of Agriculture

Program Overview

- A **Project Sponsor** is required to participate in the program and can be the state, tribe, county, city, district, essentially a **unit of government**.



Natural
Resources
Conservation
Service

nrcs.usda.gov





United States Department of Agriculture

Program Overview

- The Project Sponsor responsibilities.
 - Financial Commitment
 - Power of Eminent Domain
 - Acquisition of Permits and Licenses
 - Authority to Levy Taxes
 - Lead Public Participation
 - Operation and Maintenance - Not to exceed 100 year



Natural
Resources
Conservation
Service

nrcs.usda.gov



Program Overview

- The NRCS responsibilities.
 - Financial and Technical Assistance
 - Preparation of the Watershed Plan
 - Prepare Real Property Rights Work Maps as needed for Project Construction
 - Engineering Design Activities
 - Preparation of the Operation and Maintenance Plan
 - Operation and Maintenance Assistance – Inspection and Consultation



Natural
Resources
Conservation
Service

nrcs.usda.gov





United States Department of Agriculture

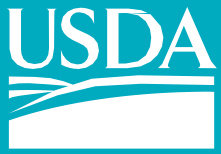
Cost Share

PL-566 Small Watershed Program



Natural
Resources
Conservation
Service

nrcs.usda.gov



Program Overview

- Project Cost Share.
 - Watershed Program cost-share rates depend on the project purpose(s) to which project costs are allocated and the type of measures to be applied.
 - Matching funds cannot be from another federal funding source.



Natural
Resources
Conservation
Service

nrcs.usda.gov

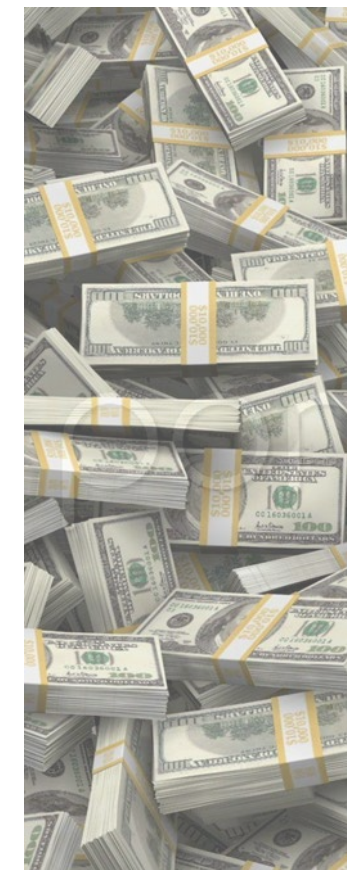




Program Overview

■ Project Cost Share.

Purpose	Installation / Construction	Engineering / Technical Assistance	Real Property Rights
Flood Prevention • Works of Improvement	100 ¹ percent	100 ¹ percent	0
Watershed Protection • Flood Control • Erosion and Sedimentation Reduction • Water Quality • Water Conservation • Wildlife Habitat • Woodland • Energy • Recreation Resources	Variable ²	100 percent	0
Public Fish and Wildlife or Public Recreational Development • Works of Improvement • Recreation Minimum Basic Facilities	No more than 50 ¹ percent No more than 50 ¹ percent	100 ¹ percent	No more than 50 ¹ percent No more than 50 ¹ percent
Agricultural Water Management • Drainage • Irrigation • Ground Water Recharge • Agricultural Water Supply Structure • Water Conservation • Water Quality	Up to 75 ³ percent	Up to 100 percent	0
Municipal and Industrial Water Supply • Reservoir Structure	No more than 50 ^{1,4,6} percent	0	0
Water Quality Management • Reservoir Storage	To be determined ⁶	Up to 100 percent	0
Rehabilitation • Dams	No more than 100 ^{1,5} percent	No more than 100 ¹ percent	0



Natural Resources Conservation Service

nrcs.usda.gov



Program Overview

- Project Cost Share.

Purpose	Installation / Construction	Engineering / Technical Assistance	Real Property Rights
Flood Prevention <ul style="list-style-type: none"> • Works of Improvement 	100 ¹ percent	100 ¹ percent	0
Watershed Protection <ul style="list-style-type: none"> • Flood Control • Erosion and Sedimentation Reduction • Water Quality • Water Conservation • Wildlife Habitat • Woodland • Energy • Recreation Resources 	Variable ²	100 percent	0



Natural Resources Conservation Service

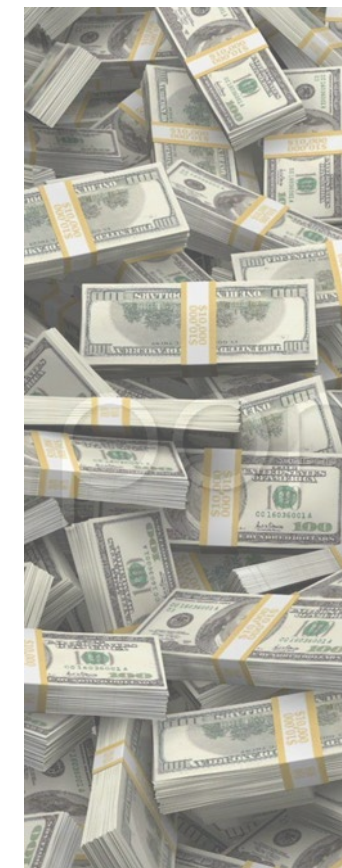
nrcs.usda.gov



Program Overview

- Project Cost Share.

Purpose	Installation / Construction	Engineering / Technical	Real Property Rights
Public Fish and Wildlife or Public Recreational Development <ul style="list-style-type: none"> • Works of Improvement • Recreation Minimum Basic Facilities 	No more than 50 ¹ percent No more than 50 ¹ percent	100 ¹ percent	No more than 50 ¹ percent No more than 50 ¹ percent
Agricultural Water Management <ul style="list-style-type: none"> • Drainage • Irrigation • Ground Water Recharge • Agricultural Water Supply Structure • Water Conservation • Water Quality 	Up to 75 ³ percent	Up to 100 percent	0



Natural Resources Conservation Service

nrcs.usda.gov



Program Overview

- Project Cost Share.

Purpose	Installation / Construction	Engineering / Technical Assistance	Real Property Rights
Municipal and Industrial Water Supply <ul style="list-style-type: none"> • Reservoir Structure 	No more than 50 ^{1,4,6} percent	0	0
Water Quality Management <ul style="list-style-type: none"> • Reservoir Storage 	To be determined ⁶	Up to 100 percent	0
Rehabilitation <ul style="list-style-type: none"> • Dams 	No more than 100 ^{1,5} percent	No more than 100 ¹ percent	0



Natural Resources Conservation Service

nrcs.usda.gov





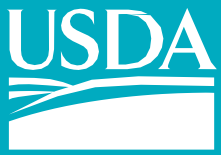
United States Department of Agriculture

Implementation PL-566 Small Watershed Program



Natural
Resources
Conservation
Service

nrcs.usda.gov

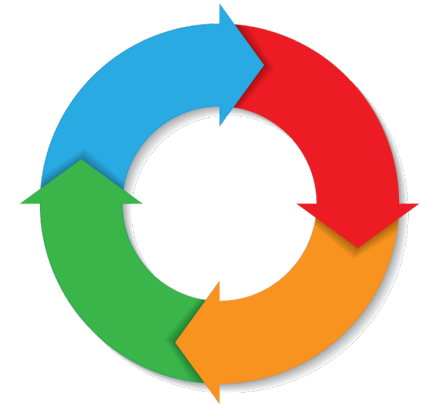


United States Department of Agriculture

PL-566 Small Watershed Program

Steps

There are **four** basic steps to fully implement a watershed project.



Natural
Resources
Conservation
Service

nrcs.usda.gov



PL-566 Small Watershed Program

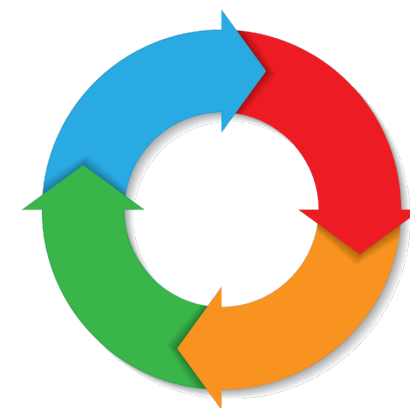
There are **four** basic steps to fully implement a watershed project.

1
Preliminary Investigation Feasibility Report (PIFR)

2
Application for Federal Assistance

3
Watershed Plan – EA/EIS

4
Implement Watershed Plan - EA/EIS



PL-566 Small Watershed Program

Steps 1 through 4

1

**Preliminary
Investigation
Feasibility
Report
(PIFR)**

2

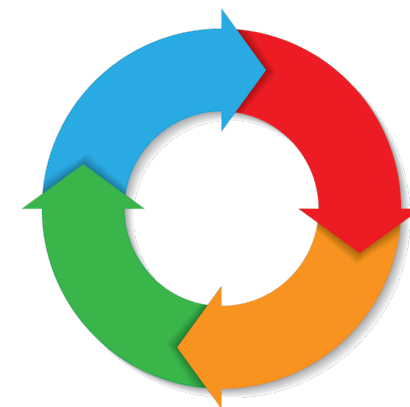
**Application
for Federal
Assistance**

3

**Watershed
Plan – EA/EIS**

4

**Implement
Watershed
Plan - EA/EIS**



Natural
Resources
Conservation
Service

nrcs.usda.gov

PL-566 Small Watershed Program

Steps 1 through 4

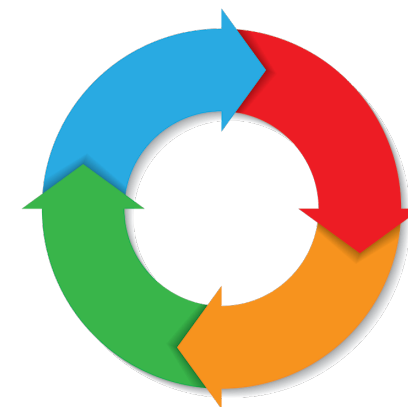
1
Preliminary
Investigation
Feasibility
Report
(PIFR)

A large red checkmark is superimposed over the text of Step 1, indicating that this step is complete or approved.

2
Application
for Federal
Assistance

3
Watershed
Plan – EA/EIS

4
Implement
Watershed
Plan - EA/EIS



Natural
Resources
Conservation
Service

nrcs.usda.gov


PL-566 Small Watershed Program

Steps 1 through 4

1
Preliminary
Investigation
Feasibility
Report
(PIFR)

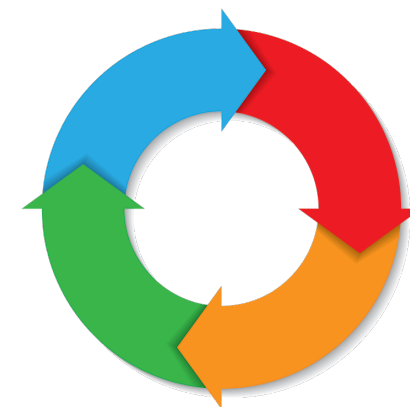
A large red checkmark is superimposed over the text of step 1.

2
Application
for Federal
Assistance

A large red checkmark is superimposed over the text of step 2.

3
Watershed
Plan – EA/EIS

4
Implement
Watershed
Plan - EA/EIS



Natural
Resources
Conservation
Service

nrcs.usda.gov

PL-566 Small Watershed Program

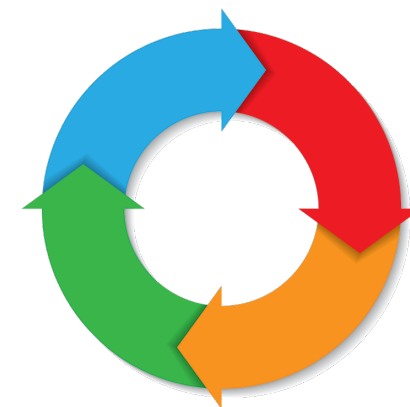
Steps 1 through 4

1
Preliminary
Investigation
Feasibility
Report
(PIFR)

2
Application
for Federal
Assistance

3
Watershed
Plan – EA/EIS

4
Implement
Watershed
Plan - EA/EIS



Natural
Resources
Conservation
Service

nrcs.usda.gov


PL-566 Small Watershed Program

Steps 1 through 4


1
Preliminary
Investigation
Feasibility
Report
(PIFR)

A large red checkmark is superimposed over the text of step 1.


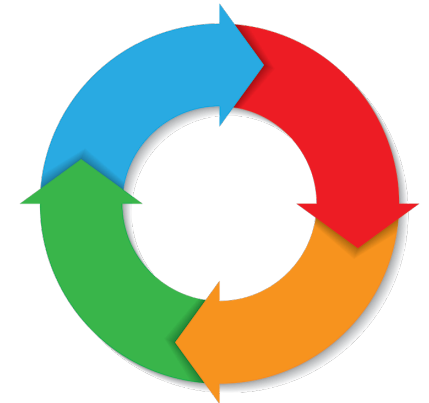
2
Application
for Federal
Assistance

A large red checkmark is superimposed over the text of step 2.

3
Watershed
Plan – EA/EIS

A large red checkmark is superimposed over the text of step 3.

4
Implement
Watershed
Plan - EA/EIS

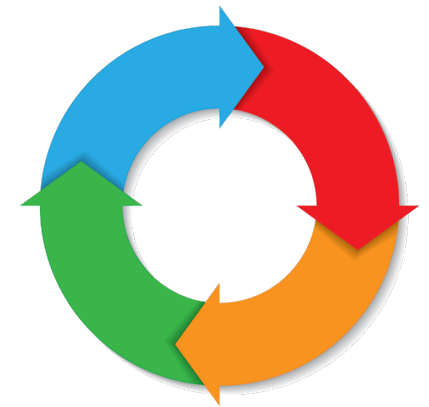
A large red checkmark is superimposed over the text of step 4.

Small Watershed Program Implementation

Timeline: So..... How long does this process take?

4-1/2 or more years is needed for full implementation.

1. Technical Feasibility Study/Report (PIFR) – 6 to 9 months
2. Application for Federal Assistance – 6 months
3. Watershed Planning – 1-1/2 to 3 years
4. Watershed Plan Implementation – 2 to 8 Years



Natural
Resources
Conservation
Service

nrcs.usda.gov



United States Department of Agriculture

Questions?



Larry Johnson, P.E.

Larry.a.johnson@usda.gov

(509) 323-2955

Natural
Resources
Conservation
Service

nrcs.usda.gov