

Town of Castile

Road Ditch Stabilization Project

Luther Grove Road - Silver Lake

**Funded through an Erosion & Sediment
Control Water Quality Mini-Grant to the
Wyoming County Soil & Water
Conservation District and the Wyoming
County FL/LOWPA Program.**

Project overview:

- Improve general drainage conditions along Luther Grove Road to:
- Reduce localized flooding issues within this section of the Silver Lake Watershed,
- Reduce road ditch erosion,
- Reduce sediment inputs into Silver Lake,
- Demonstrate the use of manufactured erosion control products with traditional methods.

Original Site Conditions

December 2005



The outlet channel on the Serventi Property was overgrown with several fallen trees blocking channel flow.

Original Site Conditions

Spring 2006



**Plugged 24" CMP
Culvert Pipe at Outlet
end of Ditch.**



New outlet channel as staked out.



Sediment deposits impede channel flows and cause localized flooding.



**Road ditch following
tree trimming and
sediment removal.**

**Road ditch in
before conditions**





**Existing side drainage
from golf course**



**Repaired with Geotextile
Fabric and Gabion Rock.**



Channel Stabilization Methods



**Rock lined channel at
corner of Silver Grove &
Luther Grove Roads to
reduce ditch erosion -
Before & After.**



Channel Stabilization Methods



**Town of Castile Highway Dept.
& Soil & Water Conservation
District Personnel installing
Land Lok 450 Permanent
Reinforcement turf along
center of road ditch.**



Channel Stabilization Methods



**Reinforcement turf
with rock and coir
log check dams.**





Coconut Fiber Coir Logs Installed as Permanent Check Dams

Channel Stabilization Methods



**Town of Castile Highway
Dept. & Soil & Water
Conservation District
Personnel installing Land
Lok CS2 coconut/straw
erosion control blankets
along center of road ditch.**





Completed channel stabilization at Luther Grove Road.

Channel Stabilization Methods



**Hydroseeding
completed
by the Wyoming
County
Highway Dept.**





New 30'' plastic culvert pipe with outlet protection.

Accomplishments

- 125 feet of improved outlet channel,
- 40 ft. of new 30” plastic culvert pipe,
- 240 ft. of straw erosion control blankets,
- 415 ft. permanent reinforcement turf
- 230 ft. of rock-lined channel,
- 0.5 acres of critical area seeding,
- 9 coconut fiber coir log check dams,
- Improved drainage outlet from golf course.