

# ERTEC Environmental Systems

Protecting Global Lands and Waterways™

## Case Study

### Ditch Guard™

Ditch and Channel Protection  
Concentrated Flows



- > Lower Project Costs
- > Better Performance
- > R R R™

- ✓ Recycled
- ✓ Reusable
- ✓ Recyclable



**Application:**

**Ditch & Channel Protection—Concentrated Flows**

**Product:**

ERTEC Ditch Guard™

**Engineer:**

Sherwood Design Engineers, San Francisco

**Project:**

**Large Private Residence, Sonoma, CA**

**Project Date:**

2008/2009

ERTEC Ditch Guard™ is a high performing and low cost approach to protect roadside ditches, swales, and channels from erosion and sediment loss. Unlike other solutions, Ditch Guard tends to spread concentrated flow and reduce flow velocities rather than concentrate flow. Installation is fast and Ditch Guard is quickly and easily removed and reused. Because it has an integrated scour pad, blankets are not required underneath or downstream of the barrier on shallow grades. Ditch Guard is flexible in both the horizontal and vertical planes.

- Erosion Control Blankets not required on shallow grades eliminating a significant cost of other solutions
- Provides very high environmental sustainability. 100% Recycled Content, Reusable, Recyclable HDPE.
- Spreads flow and significantly reduces washouts and scouring.



Packaged 30 feet per bundle



Segments overlap



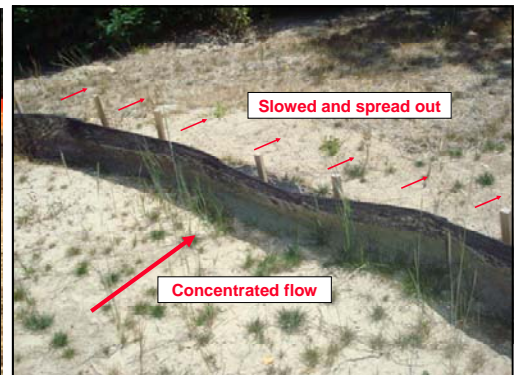
Two Stakes (1x1x18") per Segment

**The Challenge:** On this project, fiber rolls (wattles) were initially installed in the main off-site water conveyance channel and failed in the season's first storm. The fiber rolls (wattles) were undermined which caused concentrated high velocity flow which in turn led to scour and sediment movement. This is a common failure for fiber rolls which are not a good choice for slowing and spreading concentrated flow in channels. Additionally, construction projects often last 12 months or more and it is typical for a large percentage of the fiber rolls to require maintenance or replacement.

**Results:** "ERTEC Ditch Guard™ was chosen to replace the failed wattles and performed very well. Installation was quick and easy. It performed well through several heavy storms and continues to provide protection. It's been one and a half years since installation, vegetation has returned and the system hasn't required any maintenance." - Lucinda Dustin — Mudhen Environmental, Sacramento, CA.



Fiber Rolls were installed first on the site and failed in the first storm



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