

ERTEC Environmental Systems

Protecting the Integrity of Global Lands and Waterways™

Case Study ProWattle



- > Lower Project Costs
- > Better Sediment Control



Application: Commercial Construction: Perimeter Protection

Product: ERTEC ProWattle™

Location: Elk Grove, California

Customer: Jackson Properties, Retail Development Site

1st Installation: March 2005 **2nd Installation:** June 2006 **3rd Installation:** March 2007

ProWattle provides a tested, patented, **high performance** and **low cost** sediment control system for construction sites, slope stabilization, forest fire sites, vineyards, road construction, etc. to:

- Provide perimeter protection to significantly reduce off-site sedimentation
- Provide erosion control on slopes
- Stabilize low to medium flow channels

ProWattle:

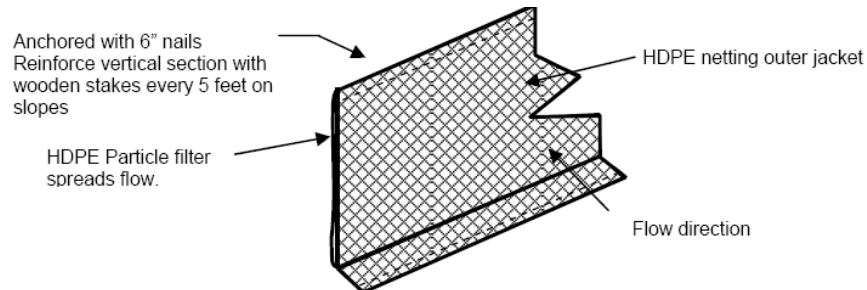
- Is an important part of a comprehensive BMP system to keep soil in place
- Allows water flow-through and significantly reduces water velocity while providing particle filtration
- Is made from durable and recyclable HDPE
- Is reusable for up to 4+ years

The Challenge: Current best practice is to use either silt fence or wattles to keep sediment from moving off-site. In this application, wattles and silt fence can become ineffective by allowing damming and undercutting. As the straw or fence material decays, storm water flow through and overtopping becomes common. Commercial construction projects often last 18 months or more and it is common that a large percentage of the wattle or silt fence installation must be maintained or replaced. ProWattle overcame the above concerns, provided better risk management, and a significant economic advantage to the builder. ProWattle was used on at least 2 subsequent projects.



Customer Quotes

- "I like the fact that ERTEC is very manageable and much easier to work with than wattles."
- "ERTEC is much more durable than wattles, providing for a large cost savings."
- "Northern CA saw heavy rain this year and sediment control performance was excellent."
Dan Jessee, Jackson Properties





Alternatives

- Wattles or Silt Fence which require an increased level of maintenance and replacements (sometimes up to 1 complete replacement—including removal, disposal, replacement, re-installation).

Solution

ProWattle anchored with two 6" Nails (60D Bright, Common) or pins per 7 foot length. Installation Instructions and Guidelines are available at: www.ertecsystems.com.

Summary and Results

Installation on the 1st project was completed in March 2005. After 14 months, in May 2006, the product was removed while the site perimeter was landscaped. The product was then taken to a 2nd project and installed again in June 2006. The product was then taken to a 3rd project and installed once again in March 2007.

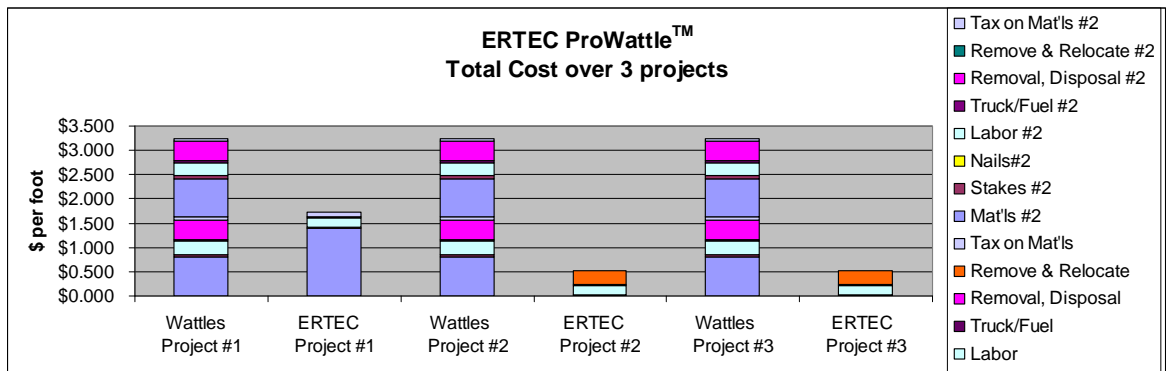
- Total costs significantly reduced. Reusable footage was greater than 95%.
- Solids in rainwater run-off to the street and eventually to the storm drain was reduced.
- Local storm water inspectors were very pleased with sediment control performance.

Keys to Success

Along with proper installation and regular light maintenance, there are methods that can create a "BMP Favorable Culture" at the job site and ensure long term performance of the BMPs.

- When the trades see that the BMPs are maintained in good condition it's more likely that a "BMP Favorable Culture" will develop.
- The site supervisor is an influencer in the success of any BMP. His or her behavior and understanding of the system will set the tone.
- It's critical for the BMP Installation and Maintenance team at the site to understand all aspects of the BMP.

Economics



Note: On a project lasting longer than 9 months, it is highly likely that the wattles or silt fence will need to be completely replaced at least once.

