

# IRON-ENHANCED SAND



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## AN INNOVATION IN STORMWATER RUNOFF TREATMENT

Now there's a more cost effective way to clean up the nation's stormwater runoff. It's centered on the reduction of phosphorus through the use elemental iron mixed with sand.

Research at the University of Minnesota led to the discovery of this iron-sand filtration. It works through a chemical process in which phosphorus molecules in water bind to iron particles within the sand filter as water passes through. Testing revealed that sand mixed with 5% iron filings captures an average of 88% phosphate for at least 200m of treated depth, significantly greater than a sand filter without iron filings\*



### Typical uses for Iron-Enhanced Sands

- Areas with minimal groundwater intrusion or tailwater effects
- Use in a treatment sequence or as a standalone "Best Management Practice (BMP)"
- Can be used as a retrofit for existing areas

### Key features of this new filtration process

- High pollutant removal rates; contaminants are eliminated as the water passes through the material
- Little maintenance needed after initial installation; natural flow of groundwater does all the work
- Good for nutrient impaired water
- Suitable for cold climates

For information on how to use Iron-Enhanced Sand, visit the Minnesota Pollution Control Agency website ([www.pca.state.mn.us](http://www.pca.state.mn.us)) The site includes information on key filtration applications.

### ORDER INFORMATION

763.441.1100



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