East Dakota Water Development District

August 2, 2012



East Dakota Water Development District

EDWDD has a broad mandate to promote conservation, development and management of water resources (SDCL 46A-3A-1).

At a practical level, almost any activity that involves water can be considered. From it's inception in 1963, EDWDD has been an active supporter of sound water resource management efforts in eastern South Dakota and across the state.

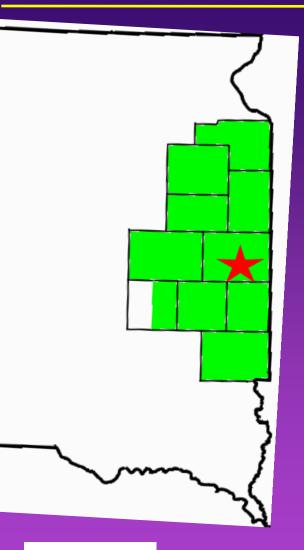






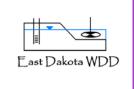


EDWDD Boundaries

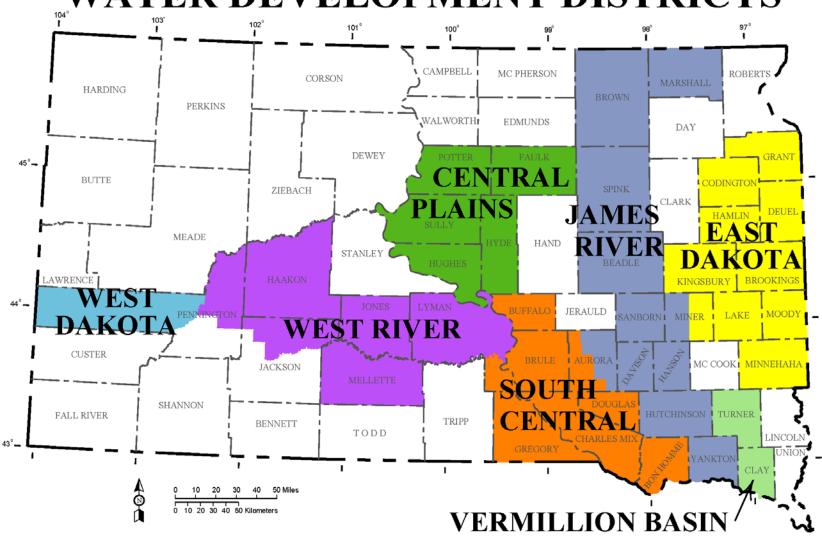


The East Dakota Water Development District is comprised of:

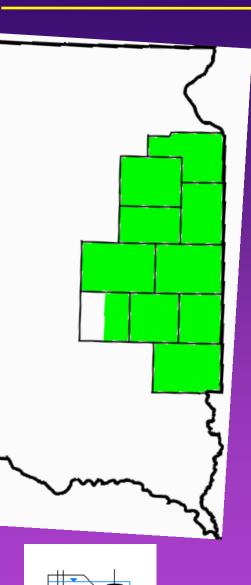
Grant County Codington County Deuel County Hamlin County **Kingsbury County Brookings County** (Eastern) Miner County **Moody County** Lake County Minnehaha County



WATER DEVELOPMENT DISTRICTS



Board of Directors



East Dakota WDD

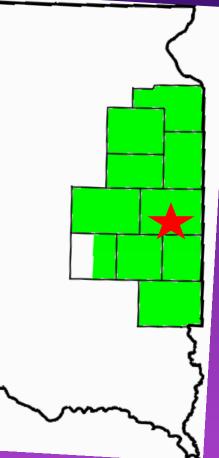
EDWDD is governed by a 9-member Board of Directors. Directors are elected to 4-year staggered terms, and represent all parts of the District.

- 1 Vincent Flemming, Florence
- 2 John Weidler, Howard
- 3 Roger Scheibe, Brookings
- 4 Martin Jarrett, Madison (Chr.)
- 5 <u>* open *</u>
- 6 Kay Kassube, Sioux Falls
- 7 Jerry Soholt, Sioux Falls (V-Chr.)
- 8 Mary Ellen Connelly, Sioux Falls
- 9 Lois Brown, Sioux Falls





EDWDD Office and Staff



EDWDD maintains an office in Brookings, 132B Airport Avenue, which is centrally located within the District.

The District currently employs five people: a Manager, two Project Scientists, a Field Technician, and an Administrative Assistant.









Funding



- □ EDWDD is authorized (SDCL 46A-3E-1) to levy taxes with the District, not to exceed \$0.30 per \$1,000 of taxable valuation (0.3 mill). For 2011 (payable in 2012), the District tax levy \$589,700. This works out to a levy rate of about 0.029 mill, or 2.9 cents per \$1,000.
- ☐ The District also actively pursues and obtains outside grants to support it's efforts, and works cooperatively with many partners to support activities of mutual interest.





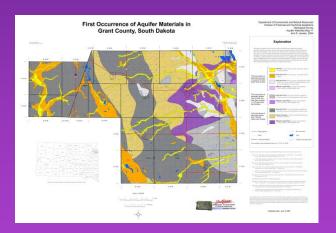






EDWDD Programs







EDWDD resources, both technical and fiscal, are applied to a wide range of activities that the District Board has determined are worthwhile and necessary.

At times, the District is the primary sponsor, but in most instances it provides assistance to efforts initiated by others.

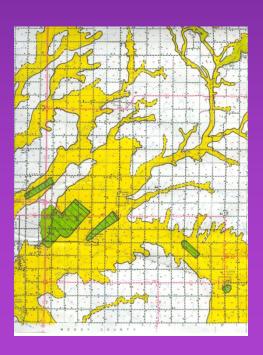
Groundwater Protection

<u>All</u> residents of EDWDD depend on shallow aquifers for their primary or secondary drinking water supplies. The District has lead efforts to identify these critical resources, and then help develop and promote efforts to protect these resources for current and future users.









Water Festivals

Each year, nearly 4,000 4th graders attend water festivals in Brookings and Sioux Falls. Students learn about the importance of water in their daily lives through hands-on and interactive presentations. 2012 marked the 20th and 19th year respectively for these events.











Volunteer Water Monitoring

Dakota Water Watch provides groups and individual citizens across the state with the tools to check the quality and condition of the lakes and streams they live on.

DWW volunteers gather data on water clarity, nutrient loads, bacteria levels, or whatever they have an interest in.

DWW data supplement existing state and local water quality assessment efforts.









Watershed Assessments

There are hundreds of lakes, rivers and streams in EDWDD. The District has lead efforts to assess the condition of these water bodies, identify problems and develop practical solutions.

Recent studies have evaluated:

- Big Sioux River and its tributaries
- School & Bullhead Lakes
- City of Brookings Storm Sewers
- Lake Campbell



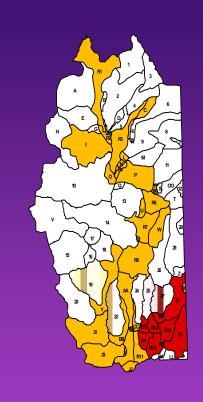


Watershed Restoration

Erosion Reduction

Many District rivers and streams have problems with too much sediment in the water.

The District has sponsored programs to work with land owners to reduce erosion, particularly along river banks and shore lines.











Watershed Restoration

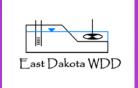
Land-Use Easements

The greatest impact on our river and lakes comes from what is happening right along the banks. EDWDD has created a program to pay land owners to limit certain activities in these areas, in exchange for compensation. Land owners can help protect the river, and still derive an income from their property. Everybody benefits!









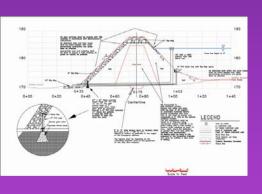
Property owners sign easements

• They'll help keep the Big Sioux River clean

Financial Assistance



EDWDD provides costshare grants to government agencies and public utilities for efforts to protect area water resources.





Activities include improvements to water and waste water treatment, storm water management and flood control efforts.



Technical Assistance

District staff have training and broad experience in a range of water resource-related fields. They provide advice and assistance on such topics as:

- aquifer mapping & protection
- lake and riparian development
- water quality analysis
- drainage
- environmental education
- grant writing







Upper Minnesota River WQ Study

Watersheds don't always follow political boundaries. In 2010 & 2011 EDWDD worked on a water quality study of two "border" watersheds, the Whetstone (blue) and Yellow Bank (yellow) Rivers.

The study was a cooperative effort of water interests in both South Dakota (EDWDD, SD DENR) and Minnesota (UMR WD, LQP/YB WD, MPCA) to address common concerns.





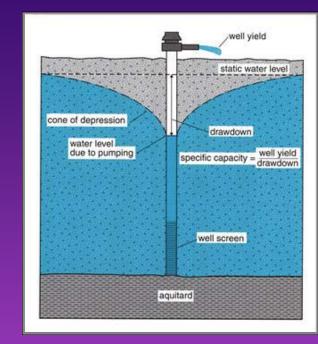




Source Water/Well Head Protection

Public water suppliers are highly dependent on a small number of water sources. The District has set aside \$250,000 to promote and assist pro-active efforts to protect the water supplies we all depend on.

Likely activities include purchasing land around well fields, land-use agreements with neighboring property owners, and expanded WQ monitoring to identify problems before they enter the water delivery system.









Riparian Easements

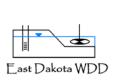
Building on the success of past programs, the District has targeted \$250,000 toward efforts to acquire easements along impaired waters.





Stage and Discharge Monitoring

Contract with SD DENR to measure stream/river stage (water level) and discharge (volume/unit time) at over two dozen locations in the Minnesota, Big Sioux and Vermillion River basins.



Water Management (Drainage)

- Watershed Hydrology
 - Road crossing inventory (Kingsbury Co. pilot)
 - USGS stream gage study
- Water Quality Impacts
 - Literature review by SDSU
 - Nitrate removal using bioreactors
 - Local WQ investigations (CDs, USFWS)
- Drainage Impacts on hydrology
 - Modeling water movement in tiled soils



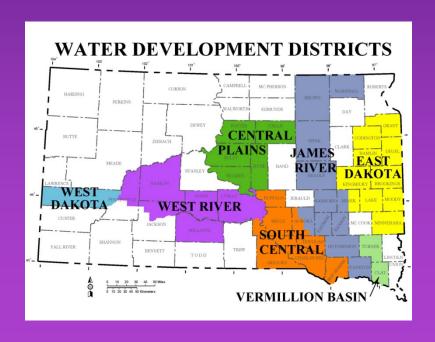




2012 Summer Study Request

Senate Concurrent Resolution 5

Supporting and encouraging a 2012 interim study and thorough review of drainage laws in South Dakota





Senate Bill 169

- An Act to establish the Regional Watershed Advisory Task Force
- 14 member body
 - 4 Senators, 4 Representatives, 6 Citizens
- First meeting July 23rd, 2012.
 - Background information on SD hydrology and watersheds (USGS), federal programs (NRCS) and local drainage issues (EDWDD).
 - Public testimony.
- Next Meeting?? (East River)
- Sunset January 20, 2015.

Regional Watershed Advisory Task Force

• To make recommendations as to:

- The proper role, purposes, structure, powers, boundaries, and financing for regional and local watershed districts and the relationship of such districts to other types of water and natural resources-related special purpose districts;
- The role of watershed districts and other state and local government entities with respect to drainage issues, including drainage planning and management, resolution of drainage disputes, and recommendations for potential realignment of responsibilities for drainage matters; and
- Potential alternative organizational structures, entities, and strategies appropriate to address statewide, regional, and local issues relating to water and natural resources conservation, protection, management, and use.



