

CULVERT COST SHARE POLICY

CULVERT SIZING AS PART OF LEGAL DITCH SYSTEM REPAIRS

I. Purpose. The purpose of this Policy is to encourage and promote the sizing of culverts to reduce peak flows and provide temporary distributive storage for the Bois de Sioux Watershed District (the “District”). Because this Policy promotes flood damage reduction, the District will utilize watershed funds to reimburse Minn. Stat. § 103E ditch system funds, for which the District is the ditch authority, upon conformance of the drainage system’s culverts with the District’s culvert sizing goals.

II. Flood Damage Reduction Technique – Compliance with 2003 Overall Plan. Culvert sizing is a flood damage reduction technique that benefits the entire watershed and the Red River Basin. Culvert sizing is a recognized priority in the District’s Overall Plan, dated May 23, 2003, as described under Overall Watershed Goals and Objectives:

Culvert sizing is a flood control technique that incorporates roads and other man-made barriers to provide short-term detention of floodwater and reduce peak flows. It is a widely used form of flood control which can provide benefits throughout the watershed and appeals to a sense of fairness.

Culvert sizing should be based on drainage area and closely matched to channel capacity. When channel capacity is exceeded, the culvert restricts flows and the excess water temporarily impounded upstream. For the method to be safe and effective, the [road] grade must be high enough to prevent overtopping or be designed to overflow without washing out.

The District has routinely included culvert sizing as a mitigation requirement in granting drainage improvement permits. Projects to accelerate widespread implementation of culvert sizing may be a possibility. An inventory of existing culverts, and their respective drainage areas, is needed to evaluate the current status and future potential of this alternative.

The flood control benefits of culvert sizing are greatest when implemented in the middle and late contributing areas of the watershed.

III. Board of Water and Soil Resources (BWSR) Performance Review and Assistance Program (PRAP). In addition to being supported by the District’s Overall Plan, culvert sizing is supported by BWSR’s PRAP Level III:

Water Quantity Planned Action or Result: Promote distributive storage across the watershed through culvert sizing criteria.

IV. Cost Share Program Requirements. In recognition of the flood damage reduction benefits previously described, the District will reimburse a Minn. Stat. § 103E ditch system fund, for which the District is the ditch authority, upon conformance of the drainage system's culverts with the District's culvert sizing goals as part of a major repair or improvement process that includes a clean water retrofit of the ditch and redetermination of benefits. Clean water retrofits involve the flattening of ditch side-slopes, construction of berms, and installation of side-inlet culverts. The District will reimburse the ditch system fund for the following items, including but not limited to, culvert design, culvert materials, and installation. Cost share approval will be granted on a case-by-case basis depending on availability of funds, conformance with this Policy, and the following conditions:

1. The District must be the ditch authority for the Minn. Stat. § 103E ditch system.
2. Culvert size, design specifications, and installation specifications must be determined by District engineering staff.
3. This Policy is limited to in-line (in-channel) crossing culverts for both public and private crossings. Side-inlet culverts are not funded under this Policy.
4. This Policy is limited to Minn. Stat. § 103E ditches under the authority of the District that proceed with a major repair or improvement that includes a clean water retrofit of the ditch and a redetermination of benefits.
5. Reimbursement will be determined by the District's Board of Managers on a case-by-case basis; availability of funds and potential for alternative funding sources will be a consideration.
6. The District's Board of Managers, at its sole discretion, will determine whether to expend funds pursuant to this Policy.

V. Effective Date. Approved this 11th day of January, 2019. This Policy is retroactive to include the recently completed repair of TCD #37 and repair of WCD #8.