

Malloy Drain Project Background for Phase 2A News Release

The Malloy Drainage Basin encompasses the Town of Coaldale and the surrounding area in Lethbridge County between Township Roads 9-4 and 8-2 and Range Roads 21-1 and 19-1, for a total area of 21,662 ha (53,528 acres).

Drainage in this area has been an ongoing problem for the Town of Coaldale, Lethbridge County and the St. Mary River Irrigation District (SMRID) due to a history of repeated flooding. In the past 22 years, significant flooding has occurred five times as a result of extreme runoff weather events that occurred in 1995, 2002, 2005, 2010 and 2014. As no natural drainage courses exist in the area, a combination of irrigation works, constructed drains, roadside ditches and storm ponds collect and channel the rain and snowmelt runoff to Stafford Reservoir. Capacity restraints in the Malloy Drain resulted in significant flooding between Coaldale and Stafford Reservoir and overland flows entering Coaldale necessitated a joint response to the problems.

After 2002 event, the Town, County and SMRID elected officials and administrations began discussions on the Malloy Basin drainage issues. MPE Engineering Ltd. was hired to undertake a stormwater study of the basin.

In 2008, the Malloy Drain Steering Committee was formed and comprised of elected officials and staff representatives from the SMRID, County and Town, as well as representatives from Alberta Environment and Alberta Transportation.

At the request of Alberta Environment and pursuant to Section 21 of the *Irrigation Districts Act*, the Town and County signed Water Conveyance Agreements with the SMRID authorizing the use of the Malloy Drain for drainage. A Memorandum of Understanding detailing continued joint use, operation, maintenance and rehabilitation of the Malloy Drain was signed formalizing the Malloy Drain partnership.

The Malloy Drain Master Drainage Plan was completed by MPE on behalf of the Steering Committee in 2010 and was subsequently adopted by each of the three partner agencies.

The highest priority for upgrading in the Malloy Basin was identified as the downstream reaches of the Malloy Drain. In 2010, a grant for \$722,000 was secured through the Alberta Water Management and Erosion Control Program. Between January 2010 and April 2011 the construction of 930 metres of Malloy Drain channel upgrades and two County road crossings were completed in Section 15, Township 9, Range 19, W4M.

In 2011, a Ten Year Project Implementation Plan was approved by all three parties. The proposed upgrades were broken into ten projects with costs between \$500,000 to \$1,500,000 and totalling \$7,860,000. The highest priority was given to finishing the upgrades to the Malloy Drain at the downstream end of the basin. The next priority was given to developing detention facilities in the Coaldale area. No engineering design or construction was completed between 2011 and 2014.

In 2014 the Malloy Drain Steering Committee modified the Ten Year Project Implementation Plan and created a new Three Year Project Implementation Plan with project costs of approximately \$3.8 million per year (\$11.4 million total). Year 1 focused on completing upgrades to the downstream reaches of the Malloy Drain, Year 2 focused on developing stormwater storage in the Coaldale area and Year 3 focused on upgrading the Upper Malloy conveyance system upstream of Highway 3.

Also in 2014, the Malloy Drain Steering Committee made a successful application to the Province's Alberta Community Resiliency Program and received approval in the spring of 2015 for \$3,850,000 to complete upgrades to the downstream reaches of the Malloy Drain. The SMRID, County and Town each contributed \$185,000 to the project. Work began in November of 2015 on what was now known as Phase 1, and included the upgrade of 3,700 metres of drain, replacement of existing canal structures, and the upgrade of the Highway 512 crossing. Work was completed on time (April 2016) and under budget.

In 2016, the Alberta Community Resiliency Program (ACRP) approved the use of unexpended funds from the 2015 Phase 1 Grant for the completion of the upgrades to the Malloy Drain east of Highway 512. Work on 1,600 metres of drain upgrades east of Highway 512 began in the fall of 2016 and was completed in the spring of 2017. The ACRP recently approved the use of the final remaining project funding to construct a low level crossing of the drain east of Highway 512 for improved maintenance access, and the construction of a flow monitoring station to allow the SMRID to monitor the flow from the drain into Stafford Reservoir in real time in an effort to improve their ability to manage the level of Stafford Reservoir.

With construction of Phase 1 (Year 1) underway in the fall of 2015, the Malloy Drain Steering Committee agreed to move forward with Phase 2 (Year 2) and MPE Engineering completed the Phase 2 Preliminary Engineering Report which outlined which stormwater detention facilities should be constructed in the Coaldale area. The Steering Committee and their respective Councils and Board agreed to move forward with the next highest priority – addressing the stormwater entering the Town of Coaldale from the west.

In the fall of 2015 the Steering Committee submitted an application to ACRP for additional funding to begin developing the \$5,400,000 Phase 2A Project which involves the construction of the following:

- An interceptor channel and 75,000 cubic metres of temporary stormwater storage west of Coaldale and south of Highway 3.
- A 1,050 mm (42") diameter pipeline to convey water from the south pond to the northwest wetlands and storage complex.
- 225,000 cubic metres of stormwater retention complex complete with sediment removal, mesic uplands and integrated marsh and wetlands water treatment and located on the east half of the SW ¼ Section 15, Township 9, Range 20, W4th meridian immediately west of the Town of Coaldale Water / Wildlife Preserve (Birds of Prey wetlands) and residential area in NW Coaldale.

In February of 2016 the ACRP approved \$4,380,000 in funding for Phase 2A with each partner contributing \$340,000 to the project. Land acquisition and detailed project design commenced in the spring of 2016 and was completed in September of 2017.

The Northwest Wetlands and Stormwater Retention component of the project was tendered in September with a project budget of \$2,500,000. Tanex (2003) Inc / Dennis's Dirtworx were the low bidders with a bid of \$1,748,116.00. Construction is scheduled to begin October 23rd, 2017. The Interceptor Channel, South Pond and Pipeline component of the project will be tendered the week of October 16th, with construction planned to commence in mid-November 2017.