

RECLAMATION

Managing Water in the West

Helena Valley Canal Assessment of Urbanized Areas



U.S. Department of the Interior
Bureau of Reclamation

Canals Considered for the Assessment

Helena Valley Canal – Helena Valley Unit, P-S MBP, MT

Dodson South Canal – Milk River Project, MT

Ozark Canal - W.C Austin Project, OK

Altus Canal - W.C Austin Project, OK

Spring Valley Canal – Sun River Project, MT

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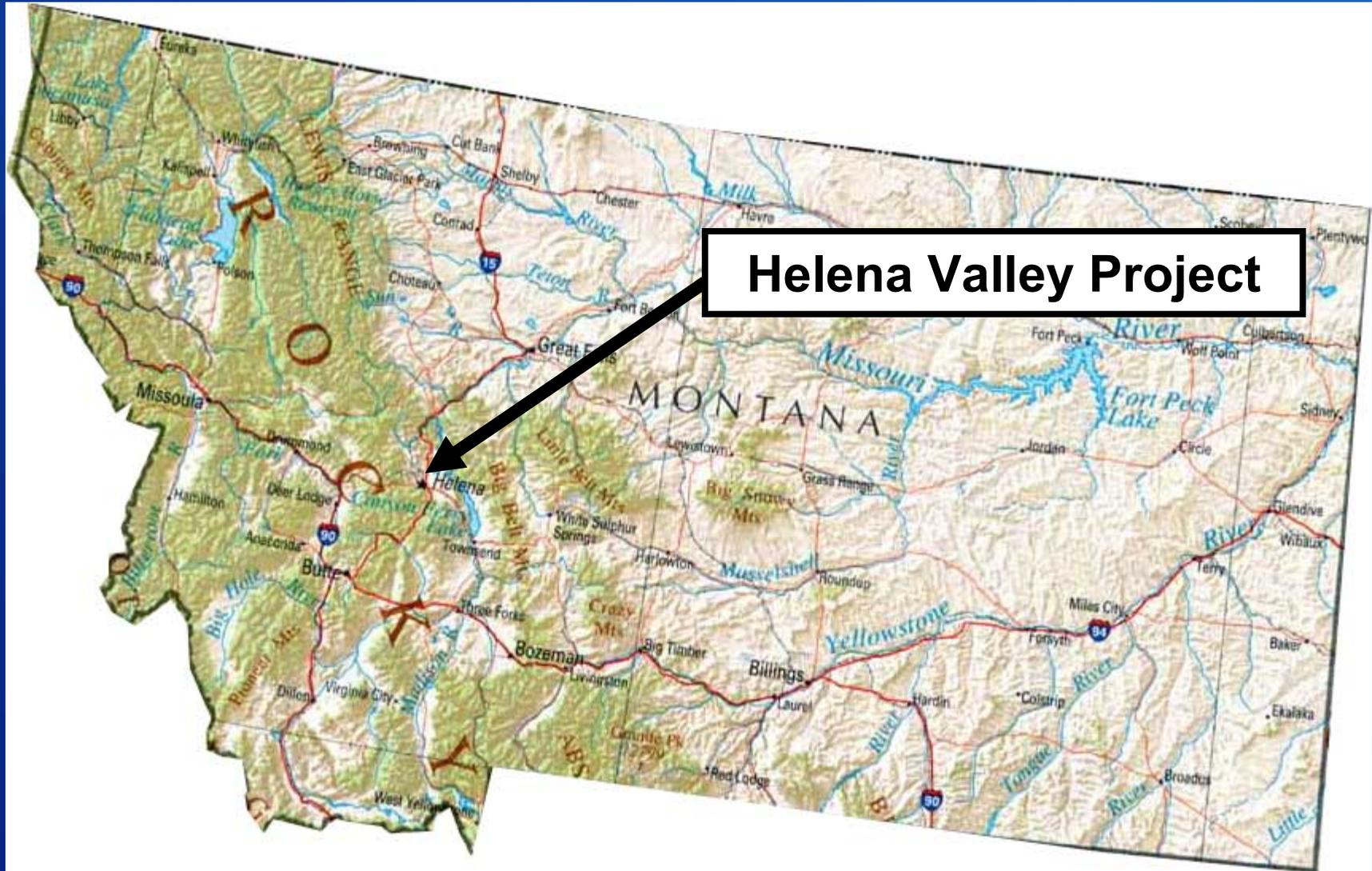
Altus Canal – W.C. Austin Project, OK



Will be
assessed
June 10, 2008

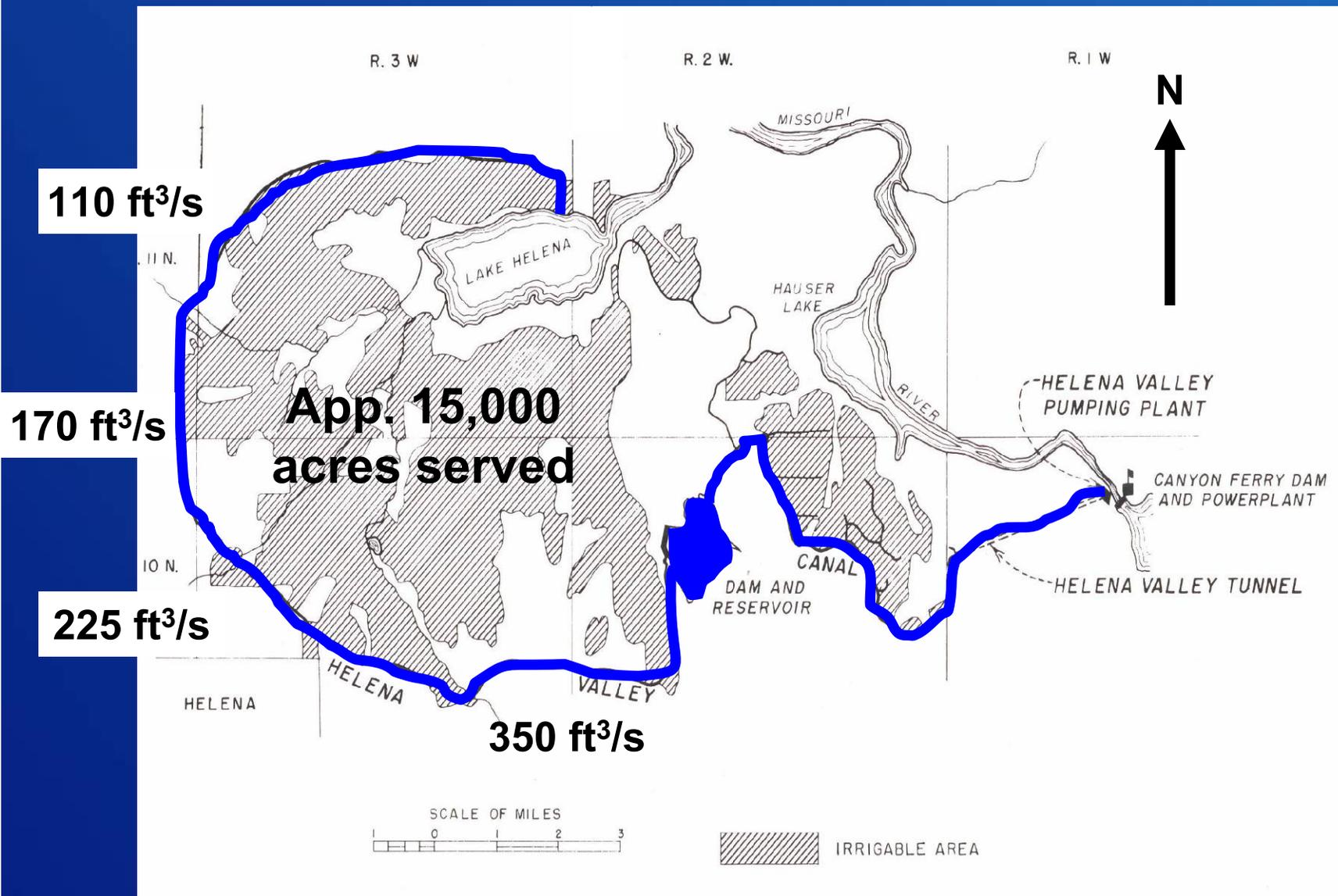
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Helena Valley Project



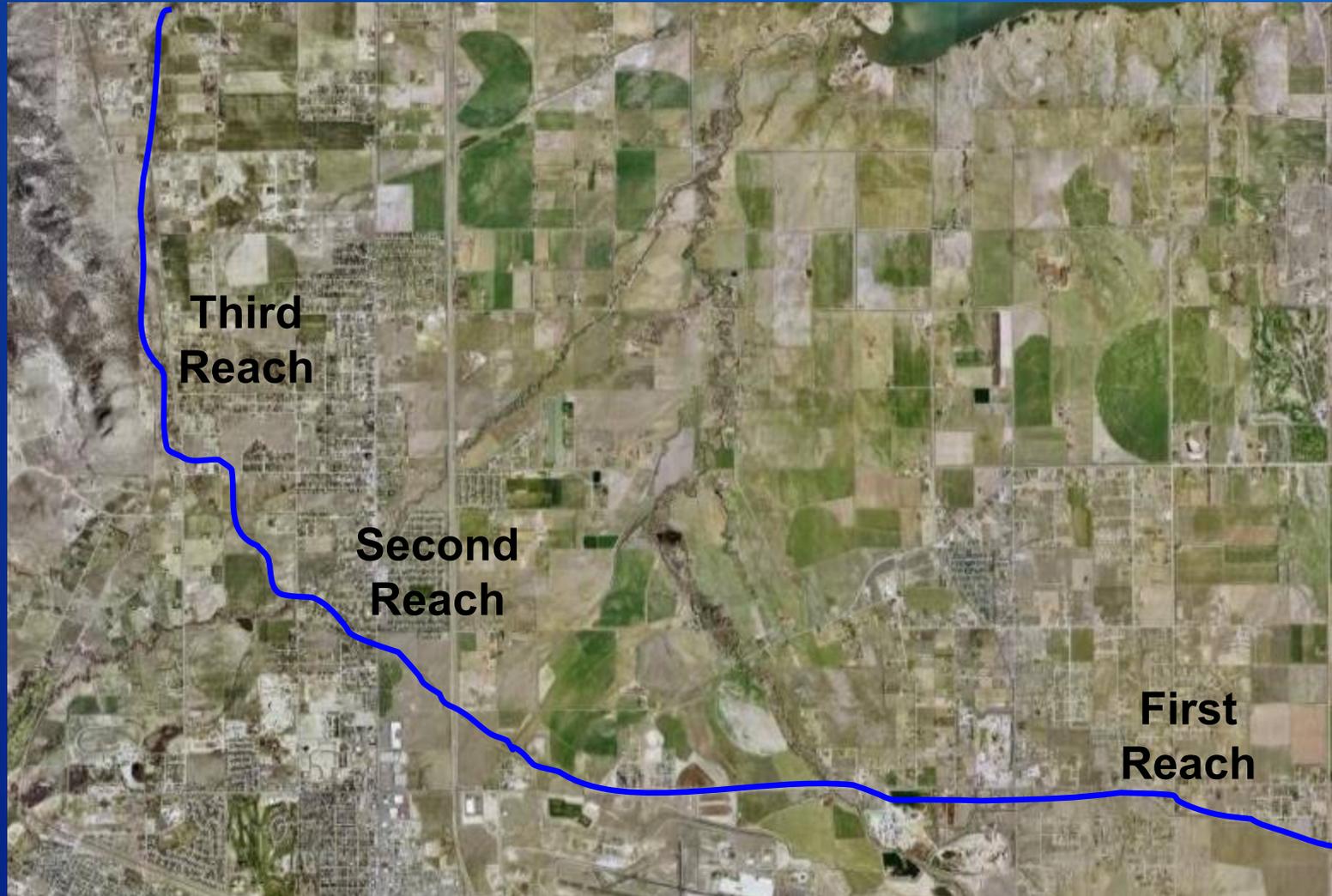
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Helena Valley Project and Canal



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Helena Valley Project and Canal



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Helena Valley Canal Urbanization



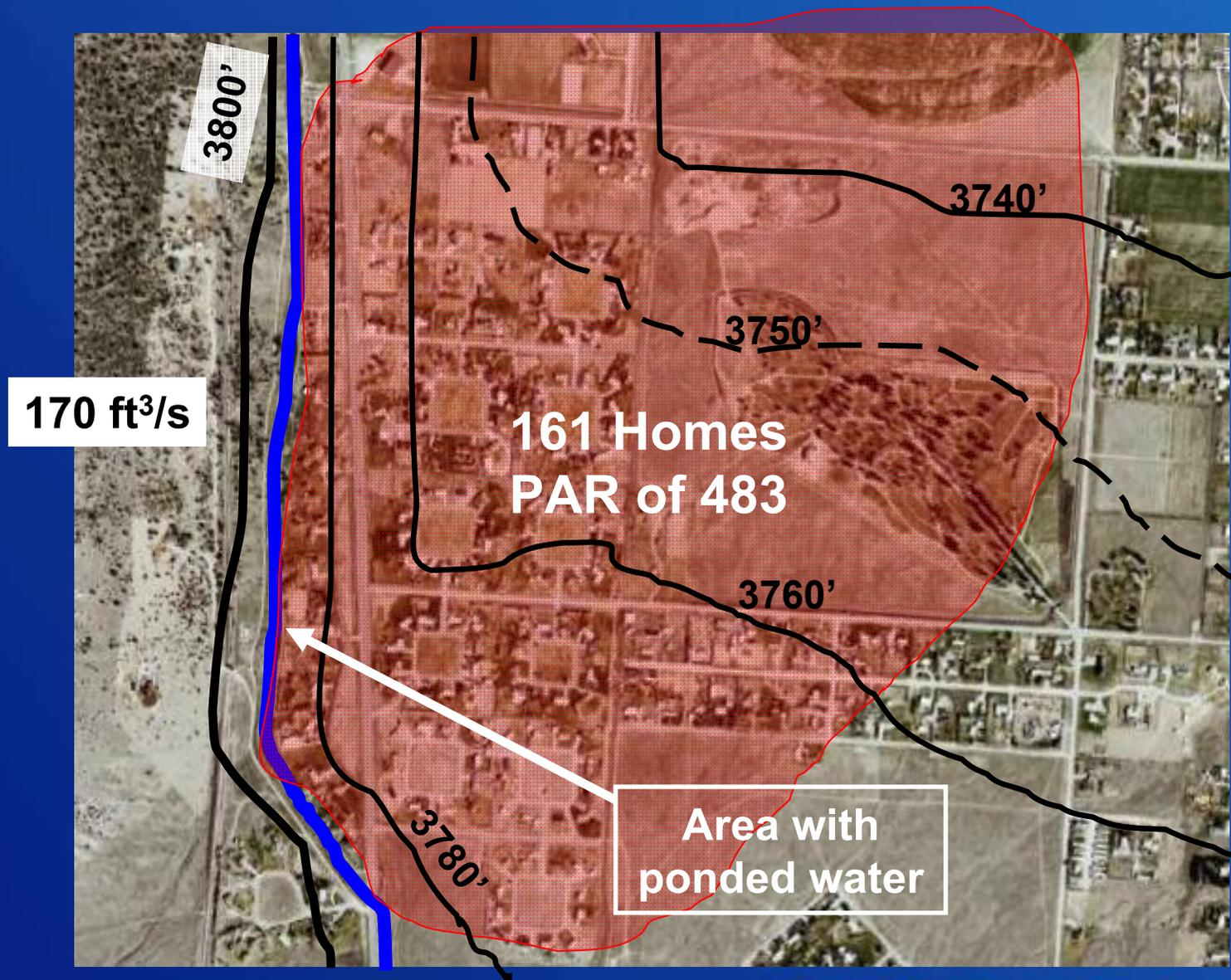
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Helena Valley Canal Urbanization



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Helena Valley Canal Assessed Reach



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Helena Valley Canal Assessed Reach

- Assuming a worst case scenario of a breach occurring 4 hours before the upstream radial gate can be closed, and 6 hours before check boards can be installed upstream and downstream, the breach volume is estimated to be 178 acre-feet or less.
- 500 ft³/s breach discharge averaged over 4 hours = 165 acre-feet.
- The canal volume from the radial gate to the terminal wasteway is about 122 acre-feet.
- The design flow of 170 ft³/s for 4 hours adds 56 additional acre-feet.

Helena Valley Canal Assessed Reach



During the irrigation season, this area has had ponded water. Adjacent yards are saturated. Some areas have artesian conditions.

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Helena Valley Canal Assessed Reach



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Helena Valley Canal Assessed Reach



Trees and Willows on canal embankment and toe.

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- End

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