

WQPD BUDGET

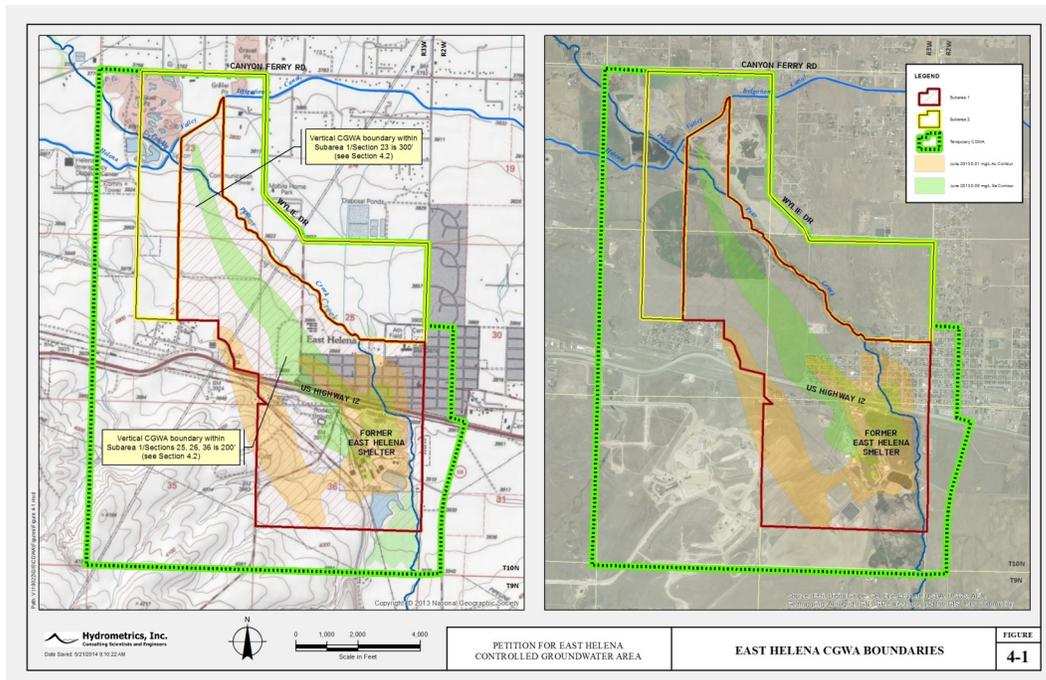
- As of June 30, 2015 fiscal year end, total revenues received were \$373,951; the total expenditures were \$387,307; expenditures exceeded revenues by \$13,356 leaving an ending cash balance of \$88,438.

WQPD FEES & PERSONNEL

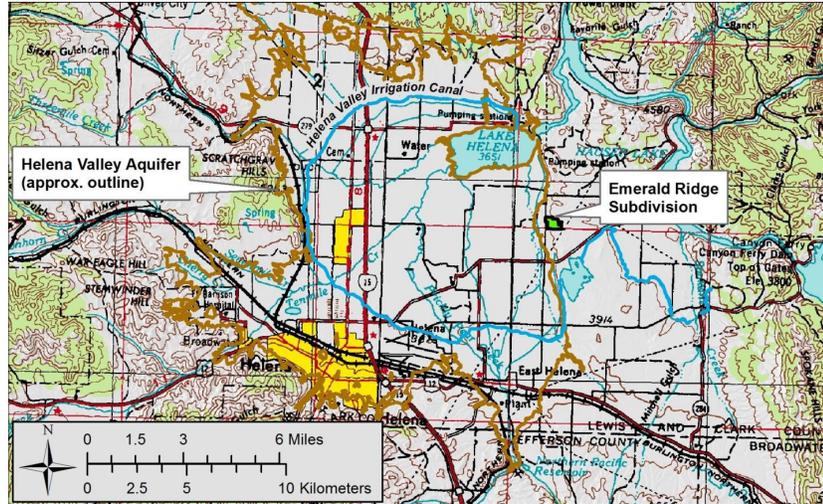
- WQPD Personnel: The WQPD currently employs 3.55 FTE
 - Water Quality District Administrator – 0.20 FTE
 - Water Quality District Coordinator – .80 FTE (Starting July 2015)
 - Community Outreach & Watershed Coordinator – 1 FTE
 - Hydrogeologist – 1 FTE
 - Outreach Educator – 0.35 FTE
 - Administrative support staff – 0.20 FTE
- Currently fees for County residents pay \$10.24 a year and residents of Helena and East Helena pay \$8.38 a year. The fee is based upon water usage for city, non-city, commercial and industrial units.

WQPD PROJECTS & ACTIVITIES

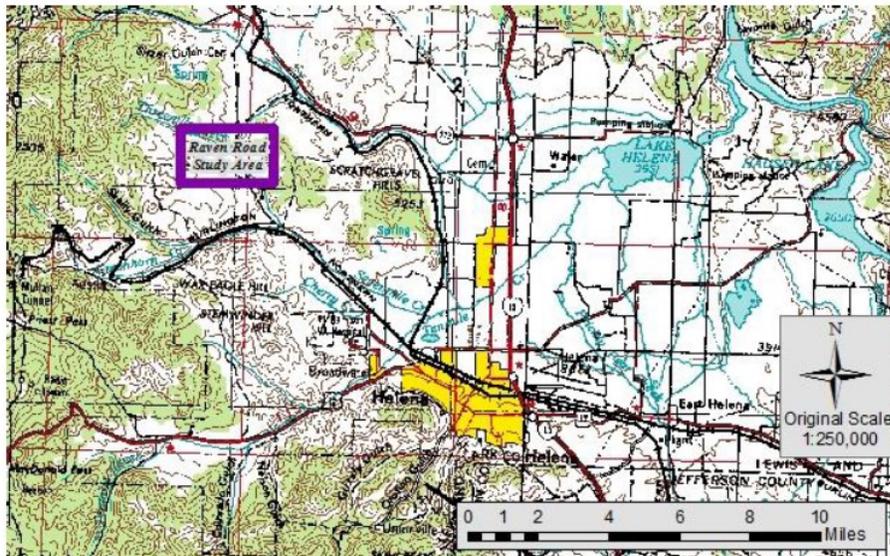
East Valley Controlled Groundwater Area-Petition to designate a controlled groundwater area was filed August 2014. Data collected within the boundaries of the East Valley Controlled Groundwater Area indicate arsenic and selenium contamination, primarily from the former smelter, in the groundwater of Helena Valley alluvial aquifer. For more information: <http://dnrc.mt.gov/divisions/water/water-rights/controlled-ground-water-areas/east-valley>



Emerald Ridge Groundwater Issues—Since development in 2004, yields from private wells for residents of the Emerald Ridge subdivision have diminished, resulting in numerous replacement wells. In response to the problems, the Lewis and Clark Water Quality Protection District (LCWQPD) began a monitoring program, collecting monthly water levels at selected wells in the subdivision in December 2012. As part of the monitoring program, a limited number of water quality samples were collected at this time to determine major ion water quality type, nutrient and trace metal concentrations. Data indicate that significant ground water depletion of the local aquifer has occurred in the area since 2004, and likely continues at this time. Link to Emerald Ridge Area Ground Water Resource Assessment—March 2014 www.lccountymt.gov/health/water/water-quality-resources/reports



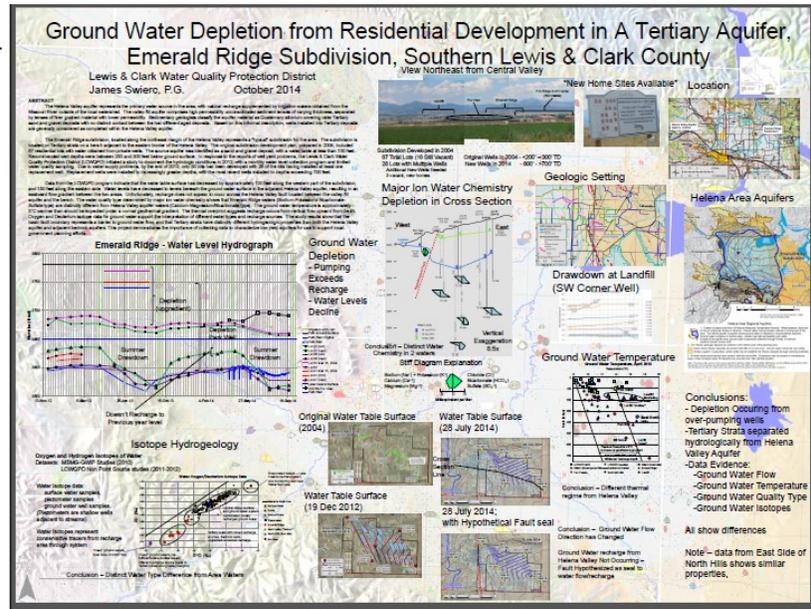
Raven Road Groundwater Project—A collaborative study was conducted by the Environmental Studies Program at Carroll College, WQPD, and DEQ in March 2015. The goal of the project was to investigate the source of elevated nitrates in shallow groundwater



detected in a Public Water Supply (PWS). 16 wells were sampled for arsenic, nitrate, and or uranium of those nine had elevated levels. Eight wells were resampled in September 2015. Funding provided by both WQPD and DEQ. Link to report: www.lccountymt.gov/health/water/water-quality-resources/reports.html

Figure 1 – Location Map for Raven Road Project
Project located in unincorporated Lewis & Clark County, within the Lewis & Clark Water Quality Protection District.

East Bench Groundwater GWIP nomination proposal – April 2015— East Bench water issues led to GWIP investigation proposal that would focus on areas outside to the Helena Valley where private wells for potable water, has resulted in declining water levels in Tertiary deposits.



Prickly Pear Creek (PPC) Rewatering Project—on-going

- WQPD assumed coordination of annual project to maintain water in creek (2013)
- Project purchases of replacement water from the US Bureau of Reclamation Helena Valley Unit for use by the Prickly Pear Water Users Association (PPWUA) members. Water is delivered by the Helena Valley Irrigation District under contract.
- PPWUA ceased their diversion of PPC water, allowing their surface water rights to remain in-stream to restore flow in PPC below their point of diversion.
- The Rewatering Project started July 1st and the creek diversion was closed at this time.
- 2014-2015 project funding was provided by:
 - ~Bonneville Environmental Foundation with Coca Cola corporate contribution;
 - ~City of Helena
 - ~WQPD and donated services from Water Legend Hydrology & Farm-Stream Solutions.

United States Geological Survey (USGS) Gaging Stations -

- WQPD coordinated cooperative agreement for the County and various donations to fund the gaging station at Tenmile Creek near Rimini. This support allows the USGS to continue the operation of the Prickly Pear Creek near Clancy station and the station on Tenmile Creek near Helena (Williams Street bridge site).
- These gaging stations are also linked to the National Weather Service website for flood prediction service.

WQPD surface water monitoring network-

- Surface water flow monitoring has continued at 14 of 22 watershed sites
 - ~Prickly Pear Creek (7 sites),
 - ~Tenmile (3 sites), Sevenmile Creek (2 sites)
 - ~ D-2 Drain (1 site) and Helena effluent ditch (1 site)

Lake Helena Watershed Group-

- Developed an Annual 2015 Work Plan– completed 47% of action items.
- Monitor surface water on 8 sites in the watershed.
- Conducted three meetings with presentations.
- Looking into becoming a 501(c)3
- Host site for a Big Sky Watershed Corps member for the year 2016

ASSESSMENTS & DATA COLLECTION

- Approximately 114 wells measured on a monthly basis for static water levels around the Helena Valley and surrounding areas including northern Jefferson County.
- Data collected is sent to the Montana Bureau of Mines and Geology statewide Ground Water Information Center database (<http://mbmgwic.mtech.edu/>)

WQPD OUTREACH & EDUCATION

Water Watchers Program -

- Environmental education program for 4th and 5th graders
- Program reaches all classes in the Helena and East Helena School Districts
- Classroom visit and field trips to Prickly Pear and Tenmile Creek.
 - ~Fall 2014—31 classes of 5th graders– Consisted of 31 classroom visits with a full day field trip to Tenmile Creek. 800 students, 46 teacher/staff, .
 - ~Spring 2015—32 classes of 4th graders—Consisted of classroom visit with 1/2 day field trip to Prickly Pear Creek. 770 students, 47teacher/staff

Annual Watershed Festival—August 2014 & 2015

- In 2014, Festival canceled due to rain
- Held festival at Women’s Park in August 2015
- Over 25 educational booths with over 450 people visiting.

MSU Extension Well-Educated –

- Participated in MT State University Extension-Water Quality “Well Educated Program”.
- The District handed out approximately water quality sampling kits.
- WQPD receives the water quality sample results.
- Lewis & Clark Conservation District reimburses homeowner \$25 after receiving results.

WQPD Website-

- Continue update and maintenance by the WQPD staff.
- <https://www.lccountymt.gov/health/water>.

GRANT FUNDING & RELATED ACTIVITIES

Lake Helena Watershed Restoration Project—MT DEQ 319 NPS Grant

- Grant extended to December 2015 to complete watershed restoration planning and stream project.
 - ~Engineering for the Letter of Map Revision (LOMR) was conducted for the Project summer of 2015. It was approved at the end of 2015 which necessitated the District’s DEQ 319-grant extension.
 - ~Watershed Restoration Plan –.Completed and accepted by DEQ in January 2016.
 - ~Restoration project on lower Prickly Pear Creek completed in May 2016
 - ~Continued watershed wide WQPD & volunteer surface water monitoring
 - ~Outreach & Education includes planning for 2015 Watershed Festival



Helena Valley Nonpoint Assessment– MT DEQ 319 Non-Point Pollution Groundwater Grant

- The project includes water quality monitoring of underdrains in the central part of the Helena Valley with the goal of characterizing the impact of agriculture and low density urban development as non-point sources to shallow ground water quality.
- Outreach and education activities will include support for the WQPD Water Watchers program.
- Grant ends June 30, 2015.
- Link to Helena Valley Non-Point Source Assessment www.lccountymt.gov/health/water/water-quality-resources/reports.
- **Lake Helena WRP Implementation Project—MT DEQ 319 NPS Grant July 2016**
 - ~Restoration work downstream from Elliott project—2100 linear feet
 - ~Project effective monitoring
 - ~Big Sky Watershed Corps member
- **Big Sky Watershed Corps Application**
 - ~LC CD, WQPD, and LHWG
 - ~10.5 month host requirement
 - ~Applied for MWCC funding to assist in cost share amount