MINUTES OF THE CITY COUNCIL OF LAUREL

April 15, 2014

A regular meeting of the City Council of the City of Laurel, Montana, was held in the Council Chambers and called to order by Mayor Mark Mace at 6:30 p.m. on April 15, 2014.

COUNCIL MEMBERS PRESENT:		Doug Poehls
	Bruce McGee	Richard Herr
	Scot Stokes	Chuck Dickerson
	Tom Nelson	Bill Mountsier
COUNCIL MEMBERS ABSENT:	Emelie Eaton	
OTHER STAFF PRESENT:	Kurt Markegard, Public Works Director Crystal Bennett, Great West Engineering	

Mayor Mace led the Pledge of Allegiance to the American flag.

Mayor Mace asked the council to observe a moment of silence.

MINUTES:

Motion by Council Member McGee to approve the minutes of the regular meeting of April 1, 2014, as presented, seconded by Council Member Dickerson. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

CORRESPONDENCE:

Montana Department of Transportation: Letter of March 26, 2014, regarding 2014-2018 Draft Statewide Transportation Improvement Program.

Laurel Chamber of Commerce: Minutes of March 27, 2014; Agenda for April 10, 2014.

COUNCIL DISCLOSURE OF EX PARTE COMMUNICATIONS.

PUBLIC HEARING:

- Preliminary Engineering Report / Environmental Assessment

Mayor Mace asked staff to introduce the item to the council.

Kurt Markegard, Public Works Director, stated that this is the second public hearing to discuss the results of the Preliminary Engineering Report (PER) for the water system. Crystal Bennett, with Great West Engineering, attended to give a PowerPoint presentation, a copy of which is attached to these council minutes.

Crystal's presentation included the following: the Water System Study, Growth/Capacity, Water Supply, Water Treatment Plant Layout, Water Quality/Treatment, Distribution System – Layout, Distribution System, Distribution System – Pressures, Distribution System – Proposed Pressure Zones, Water Storage, Water Meters, Water Treatment Plant Alternatives, Water Treatment Plant Additive Alternatives, Water Storage Alternatives, Pumping Station Alternatives, Decision Matrix & Weighting Factors, Decision Matrix – Water Treatment Plant, Decision Matrix – Water Storage, Decision Matrix – Pumping Station, Phased Improvements, Phase 3 WTP Improvements, Phase 3 Pump Station Improvements, Estimated Costs for Phase 3 Improvements; Potential Grant Funding & Target Rates, Grant Eligibility, Projected Rates from Project Costs (Cost/User), and Actual Impacts to User Rates.

Crystal passed around a sign-in sheet for anyone that attended the hearing.

MAM

Crystal stated that the water system study, the Preliminary Engineering Report, was done to assess all the critical components of the water system. The same information was discussed at the public hearing two weeks ago.

Crystal explained that the growth and capacity requirements started with the 2010 census information and were projected through the city's growth policy. The first component reviewed was the water supply. The source is the Yellowstone River and there have been changes in the river since the 2011 flood. There are significant problems with the intake, but that is a completely separate project that is referenced in the report, but is not part of the proposed improvements.

In the Water Treatment Plant, the main issues are the existing sludge ponds, the flocculation and sedimentation basins, the backwash water storage tank, and security and access. The biggest deficiencies are the flocculation/sedimentation basins, which are literally falling apart. Some of it is contributed to being uncovered, as the freeze and thaw cycle speeds that up, but there are also possible contamination sources because it is not a covered basin. A prime example is the oil sheen that occurred just last year. Mixing capabilities are limited. There is insufficient flow to the filters, which happens between the sedimentation basin and the filters. If the basins get replaced, that issue will be fixed. The filters cannot meet the projected domestic and industrial flows. That is critical because Cenex Refinery uses a lot of water. If the way things are done is not changed, new filters would need to be built on top of the sedimentation and flocculation basins. A plan is in place for Cenex to use the settled water instead of treated water, which means the filters can be left alone. Crystal said this was a win-win situation for the refinery and the city.

Additional concerns include the sludge pond, which is unlined, has no redundancy, and needs to be replaced. The tank has leaks in it and cannot be filled completely. There are multiple issues within the building, including the actuators, valves, blowers, and the ventilation system. One of the most important issues is the lack of security.

The distribution system has 3-inch through 18-inch pipelines. The major problems are undersized, aging and non-connected lines, and that is part of the city's ongoing pipeline replacement program and is not addressed in the final project. The other issue is the low pressures, as anything below 35 psi is less than state minimum standards. Crystal explained that pressures cannot be maintained because of the big elevation difference. A pressure zone, which would be like one storage tank, can serve up to 80 feet but one zone is trying to serve 132 feet, which is mathematically impossible. The only way to alleviate that is to develop different pressure zones. She spoke regarding Zones 1, 2 and 3 in the presentation.

The water storage capacity is fine in the existing tank, but it is the only tank and it is absolutely critical that it stays in operation. The other limitation is the height because of the pressure differences. The existing tank that serves Zone 1, the lower elevation, is not going to be able to serve Zone 2. Great West Engineering recommends a second 1 million gallon storage tank, and then with pressure reducing vaults, it could be used as a backup for Zone 1.

Crystal stated that Great West went through each component and developed alternatives. The first three alternatives are different types of conventional treatment and the last two are package treatment. In general, the package treatment has a much smaller footprint, but very high O&M costs.

The additive alternatives are stand-alone options that would be done in addition to the water treatment plant improvements. The water storage alternatives include a concrete buried storage tank, a ground level steel tank, a ground level glass-fused tank, and an elevated steel tank.

For the pumping station alternatives, the Alternative P-1 option to relocate the Cherry Hills Booster Station would only be done if a storage tank is not installed. P-2 and P-3 would be completed if a storage tank is installed.

To decide between the alternatives, they were put into a decision matrix. The engineers use weighting factors to score each alternative based on all of the components. The life cycle costs have the highest weight and factor because the city is limited by funds. Ultimately, the preferred alternative for the water treatment plant is the conventional treatment with tube settlers. For water storage, the concrete buried storage tank is the preferred alternative. For the pumping station, if a tank is not constructed, P-1 is preferred to relocate the Cherry Hills Booster Station. If a tank is constructed, it would actually create a separate pressure zone, Zone 2, with relocation of the Cherry Hills Booster Station.

MAM

Public and council input was received two weeks ago to help determine how much of the project would be done. The base project for Phase 3, which is this proposed project, is the conventional treatment with tube settlers and relocation of the Cherry Hills Booster Station. Any of the additive alternatives can be done as funding allows. The future project, Phase 4, would be to actually construct the storage tank and the separate pressures on it.

Crystal stated that the biggest question is what does it cost and how do we pay for it. Target rates are considered with grant funding, and it is a rate that the Montana Department of Commerce established. The target rate is what the Department of Commerce feels a community should pay for their fair share. For Laurel, the target rate is $78.40, but the actual average rate is around $90.42. The city is at 115.3 percent of the target rate. The city does not qualify for the Community Development Block Grant because the low to moderate income is less than 50 percent. The city qualifies for the TSEP Grant for $500,000. The DNRC Grant is another good option for the city for $125,000 grant funds.

The estimated total cost of the project is almost $5.3 million. With the grants and the city reserves of $1.5 million, the total loan amount will be just over $3.3 million. Adding in the additional O&M for the project, there is a cost increase of about $315,000 per year, which equates to approximately a $7.49 rate increase per user per month, which puts it at 125 percent, if there is a rate increase.

Crystal and Shirley Ewan recently evaluated the city's financial situation. The city has two outstanding debts that will be retired in 2017 and 2018. The project should go to construction in 2015 and 2016, so there is a good possibility the loans will be paid off at that time with additional reserves and operating cash. Paying those loans off would give enough to offset the increases to the project. The bottom line is that no rate increase should be necessary for this phase of the project.

Mayor Mace opened the public hearing and read the rules governing the public hearing.

Mayor Mace asked three times if there were any proponents. There were none.

Mayor Mace asked three times if there were any opponents. There were none.

Mayor Mace closed the public comment.

Crystal stated that, with this grant funded project, it helps with the ranking to get signatures of support. She passed around a support sheet for anyone who wanted to sign it.

Mayor Mace asked for council discussion.

Council Member Poehls asked the Public Works Director to explain the project concerning the road and security at the water treatment plant.

Kurt explained that, in 2001, the federal government said that a community's critical infrastructure should be evaluated for security. At that time, Congress passed funding for Homeland Security Funds and the grants expired in 2006. The city did not ask for any grants at that time, as the city was teaming up with the Yellowstone County Sheriff's Department to apply for a grant for funding to close Sewer Plant Road and put in security fencing. The grant application was not successful. Since 2008 when he started as public works director, Kurt has been requesting security and it has been budgeted every year. A fence was installed around the reservoir. Because of the flooding in 2011 and the projects at the plant, security fencing has been delayed. Kurt spoke regarding the proposal to move the road using funding out of the O&M budget and capital improvement funds. He recently received information from Montana Rural Water regarding available Homeland Security funds of $3.2 million for the State of Montana. Applications are due May 2nd. With the completed PER, he will apply for grant funds to move the road and complete the security fencing.

Mayor Mace asked if there were any other questions from the council. There were none.

Kurt thanked Crystal Bennett and Shirley Ewan for their efforts yesterday regarding the funding for the project and for realizing that, if the city council partakes in paying off the loans, there will not be a rate increase to the public.

Mayor Mace closed the public hearing.

CONSENT ITEMS:

MAM

- **Clerk/Treasurer Financial Statements for the month of March 2014.**
- **Approval of Payroll Register for PPE 03/30/2014 totaling $185,645.14.**
- **Receiving the Committee Reports into the Record.**

--Budget/Finance Committee minutes of April 1, 2014 were presented.

--Public Works Committee minutes of April 7, 2014 were presented.

--Council Workshop minutes of April 8, 2014 were presented.

--Insurance Committee minutes of March 31, 2014 were presented.

--Cemetery Commission minutes of March 20, 2014 were presented.
--Laurel Urban Renewal Agency minutes of March 17, 2014 were presented.

The mayor asked if there was any separation of consent items. There was none.

Motion by Council Member McGee to approve the consent items as presented, seconded by Council Member Poehls. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

CEREMONIAL CALENDAR: None.

REPORTS OF BOARDS AND COMMISSIONS: None.

AUDIENCE PARTICIPATION (THREE-MINUTE LIMIT):

Heather Mitchell, P.O. Box 1114, expressed her concerns regarding the recent amendments to the animal ordinance. She has been involved with animal rescue and rehoming for over 23 years. She was not aware that the ordinance had changed until a number of people contacted her recently. She stated that breed bans and number limits on animals does not work and that limiting pets does not take care of nuisance animals. She is part of a non-profit, so right now she thinks she is legally covered, but it should not have to be that way for someone to have their pets. She continued to speak regarding reptiles and showed two that she brought to the council meeting.

JJ Anderson, 511 Pennsylvania Avenue, spoke specifically about reptiles. Before she moved to Laurel last fall, she researched the animal ordinance and everything was fine. Approximately two weeks ago, the police showed up her doorstep and told her that she had 30 days to get rid of her reptiles. She planned to buy a home and start a business in Laurel, but she will not do so unless some of the points in the ordinance are changed. She spoke regarding her snakes and stated that they cannot survive in the State of Montana if it gets below 50 degrees for one night. If it gets below 32 degrees, it will eradicate any and all of them in one shot. She continued to speak regarding the animal ordinance and stated her willingness to pay a registration fee for her animals. She asked that the city council let those that have done the research participate. She stated that FWP does not have several reptiles on a restriction list for the State of Montana. She would like to see the animal ordinance done in a more compromising manner without such a blanket ban that forces people like her, who want to contribute to the economy here and make this their home, to move away.

Heather Mitchell spoke again, stating that FWP did research in 2005 on what exotic species could harm the indigenous species and the environment and they banned some things. Those things were put on a restricted list for Montana. She thinks that group of animals being banned is appropriate for the city as well.

Rodney Tanner, 1303 East 6th Street, is interested in the laws against the exotic animals. They are reptiles and they are restrictors, but he has caught bull snakes that get longer than any recorded ball python in the state. He would like to work together regarding registering them, having Fish and Game monitor how they are kept and what they are kept in, and the maintenance on the particular animals.

MAM

SCHEDULED MATTERS:

- **Confirmation of Appointments.**

Laurel Volunteer Ambulance Service:

Mayor Mace appointed Jordan White to the Laurel Volunteer Ambulance Service.

Motion by Council Member Dickerson to approve the Mayor's appointment of Jordan White to the Laurel Volunteer Ambulance Service, seconded by Council Member Poehls. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

- **Resolution No. R14-16: Resolution to adopt the Water System Preliminary Engineering Report for the City of Laurel, Montana, as prepared and presented by Great Wet Engineering Inc.**

Motion by Council Member Nelson to approve Resolution No. R14-16, seconded by Council Member Dickerson. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

- **Resolution No. R14-17: A resolution accepting the findings of the Environmental Assessment and determining that an Environmental Impact Statement is not necessary for the Phase 3 Water System Improvements Project.**

Motion by Council Member Mountsier to approve Resolution No. R14-17, seconded by Council Member Poehls. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

- **Resolution No. R14-18: Resolution to adopt the funding strategy for Water System Improvements for the City of Laurel, Montana, as presented by Great West Engineering, Inc.**

Motion by Council Member Stokes to approve Resolution No. R14-18, seconded by Council Member Mountsier. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

- **Resolution No. R14-19: Resolution to authorize submission of TSEP Grant application.**

Motion by Council Member Herr to approve Resolution No. R14-19, seconded by Council Member Mountsier. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

- **Resolution No. R14-20: Resolution to authorize submission of DNRC-RRGL grant application.**

Motion by Council Member Poehls to approve Resolution No. R14-20, seconded by Council Member Mountsier. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

- **Resolution No. R14-21: Resolution authorizing the Mayor to execute an agreement with Beartooth RC&D Economic Development District.**

Motion by Council Member McGee to approve Resolution No. R14-21, seconded by Council Member Mountsier. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

ITEMS REMOVED FROM THE CONSENT AGENDA: None.

COMMUNITY ANNOUNCEMENTS (ONE-MINUTE LIMIT): None.

COUNCIL DISCUSSION:

MAM

Council Member Poehls stated that the Emergency Services Committee will meet on Monday, April 21st, at 5:30 p.m.

Council Member Nelson asked for discussion regarding the structure of the Insurance Committee at the next council workshop.

UNSCHEDULED MATTERS: None.

ADJOURNMENT:

Motion by Council Member McGee to adjourn the council meeting, seconded by Council Member Dickerson. There was no public comment or council discussion. A vote was taken on the motion. All seven council members present voted aye. Motion carried 7-0.

There being no further business to come before the council at this time, the meeting was adjourned at 7:25 p.m.

Cindy Allen

Cindy Allen, Council Secretary

Approved by the Mayor and passed by the City Council of the City of Laurel, Montana, this 6th day of May, 2014.

Mark A Mace

Mark A. Mace, Mayor

Attest:

Shirley Ewan

Shirley Ewan, Clerk/Treasurer

MAM

City of Laurel

Water System PER Presentation

April 15, 2014

GreatWest engineering

Water System Study

- Preliminary Engineering Report (PER) Examines Comprehensive Needs for:
  - Growth/Capacity
  - Water Supply
  - Water Quality/Treatment
  - Water Storage
  - Distribution System
  - Water Meters
- Required to Apply for Grant Funding

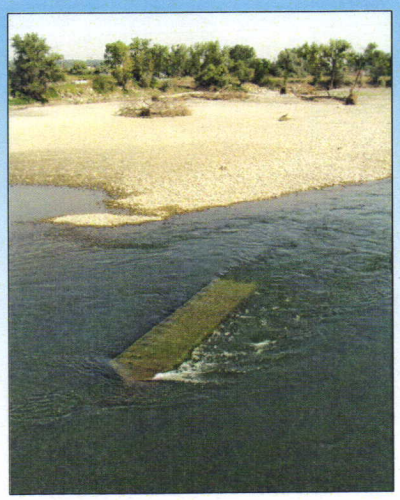
Growth/Capacity

- Populations:
  - 2010: 6,718 persons
  - 2035: 8,098 persons (Design Year)
- Water Demands:

Year	Population	Gallons per Capita per Day (gpcd)	Average Day Demand (MGD)	Peaking Factor	MDD Residential (MGD)	MDD Residential + Industrial (MGD)
2010	6,718	165	1.11	3	3.33	5.83
2015	6,974	165	1.15	3	3.45	5.95
2025	7,515	165	1.24	3	3.72	6.22
2035	8,098	165	1.34	3	4.01	6.51

Water Supply

- Source = Yellowstone River
- River changes during 2011 flood:
  - Intake exposed during low flow
  - Intake not in main channel
  - Causes icing during winter
- Separate intake study/project being completed through FEMA, Montana DES, and other agencies

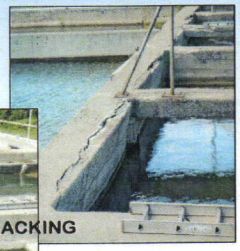


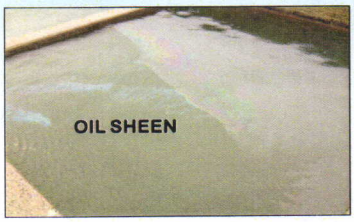
Water Treatment Plant Layout

Water Quality/Treatment

Major WTP Deficiencies

- Flocculation/sedimentation basins falling apart (over 60 years old!)
  - Uncovered portions subject to freeze/thaw cycles and possible contamination sources
  - Basins must be manually cleaned multiple times/year
- Mixing capabilities limited
- Insufficient flow to the filters – unknown cause
- Filters cannot meet projected domestic & industrial flows





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Water Quality/Treatment

Additional WTP Concerns

- Sludge pond – unlined, no redundancy
- 250,000 gallon water storage tank – holes, cannot fill completely
- Miscellaneous deficiencies – actuators, valves, blowers, ventilation, etc.
- Lack of security

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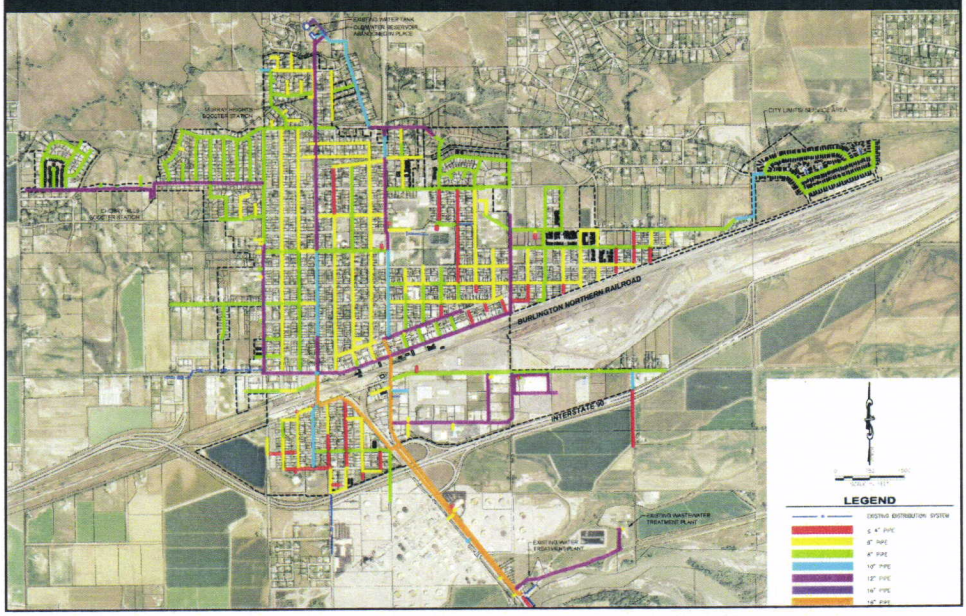
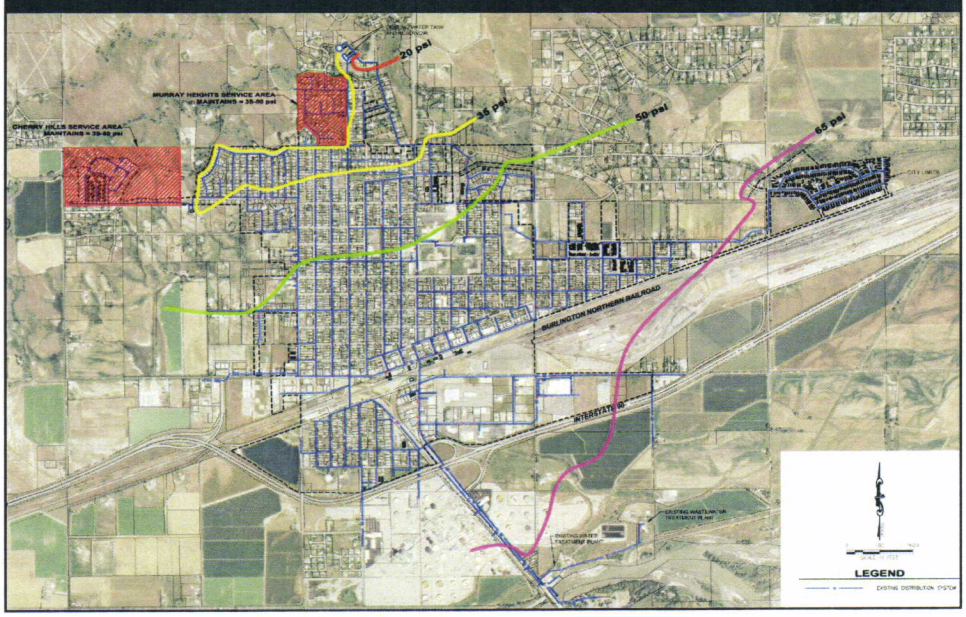
Distribution System - Layout



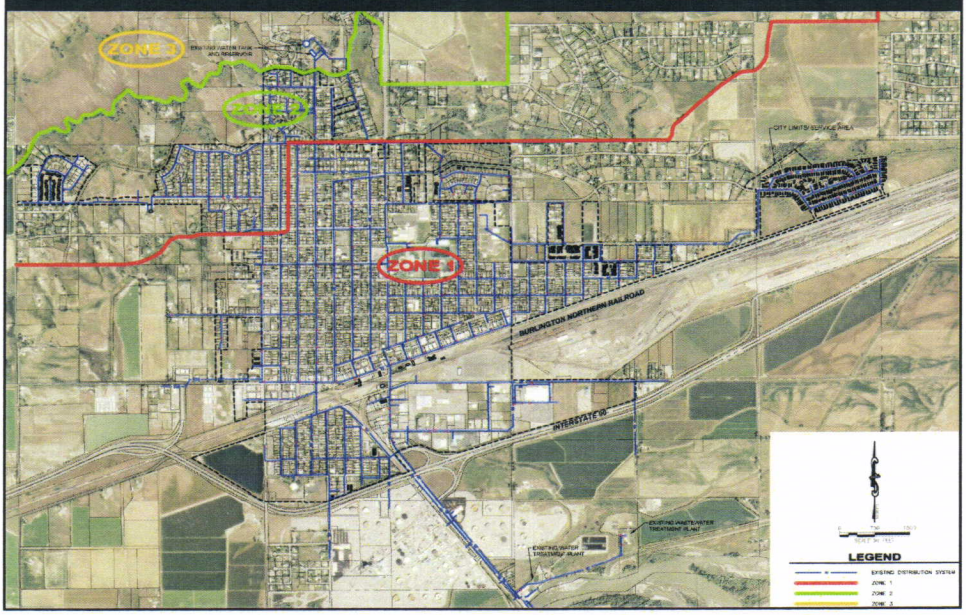
Distribution System

- Major Problems:
  - Undersized, aging, & non-connected lines --- to be replaced as part of City's Pipeline Replacement Program
  - Low pressures (particularly in north and west)
- Pressure Zone considerations:
  - One pressure zone can typically serve elevation span of 80 feet
  - City currently serving approximately 132 feet with one pressure zone
  - Only way to alleviate low pressures is to provide two pressure zones

Distribution System - Pressures



Distribution System – Proposed Pressure Zones



Water Storage

- Only 1 storage tank (4 MG) – Critical to remain in operation
- Height sufficient for "Zone 1" if City divided into separate pressure zones
- Additional 1 MG storage tank recommended to serve "Zone 2" as well as a back-up for "Zone 1"

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Water Meters

- All services metered
- Replacements done as part of maintenance
- Benefits of meters:
  - Water conservation
  - More equitable billing

How do we FIX it?

Water Treatment Plant Alternatives

	ALTERNATIVE				
	T-1	T-2A	T-2B	T-3	T-4
DESCRIPTION	Conventional Treatment - Traditional Gravity Settling	Conventional Treatment with Tube Settlers	Conventional Treatment with Plate Settlers	Packaged Treatment - High Rate Clarification, WesTech HSC	Packaged Treatment - High Rate Thickening Clarifier, WesTech CONTRAFAST
CAPITAL COST	$6,420,000	$3,927,000	$4,581,000	$117,000	$58,000
ANNUAL O&M COST	$7,046	$29,423	$6,242	$80,051	$50,379
LIFE CYCLE COST	$6,540,000	$4,427,000	$4,687,000	$8,696,000	$4,501,000
ADVANTAGES	Same as existing treatment system, very low maintenance and is known to be successful for source water quality	Essentially the same as existing treatment with the addition of the tube settlers to increase the effective settling area which reduces the overall basin size. Less expensive than plate settlers.	Essentially the same as existing treatment with the addition of the plate settlers to increase the effective settling area which reduces the overall basin size. Plate settlers have a long life as they are constructed of stainless steel.	Packaged plant, could be retrofitted in the future to include expanded filter capacity, relatively small footprint	Has the lowest capital cost and is designed to produce a thicker sed. basin sludge waste. Very small footprint.
DISADVANTAGES	Requires a significant amount of space, for expansion in current location would need to modify with tube or plate settlers in the future	Tube settlers have a life of 15 to 20 years as they are made of plastic. They would require replacement.	Plate settlers are much heavier than tube settlers, additional support (reinforced concrete) is necessary in the basins.	Different treatment technology, more operator intensive for operation, creates more sludge waste than current technolgy	Newer treatment technology setup, high O&M costs, more operator intensive than traditional treament

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Water Treatment Plant Additive Alternatives

	ALTERNATIVE			
	WTP-1	WTP-2	WTP-3	WTP-4
DESCRIPTION	Backwash/Sludge Ponds	250,000 gal. Backwash Water Storage Tank	Miscellaneous Deficiencies	Security
CAPITAL COST	$333,000	$664,000	$348,000	$528,000
ANNUAL O&M COST	No Change	No Change	$17,250	No Change
LIFE CYCLE COST	$333,000	$664,000	$641,000	$528,000
ADVANTAGES	New sludge ponds would allow for proper cleaning when necessary and also provide more storage capacity	Replacement of the existing storage tank would lower the current annual O&M costs and provide a reliable tank for the future	Each of the identified deficiencies would in some way improve the overall operations of the treatment plant	Moving the road would allow the WTP to be secured and would also allow for construction of a safer entrance/exit (no steep slope, better visibility)
DISADVANTAGES	Siting the ponds is challenging	None	Some of the deficiencies have related O&M costs	An agreement with the CHS refinery regarding the necessary space is required

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Water Storage Alternatives

	ALTERNATIVE			
	R-1	R-2A	R-2B	R-3
DESCRIPTION	Buried Concrete Tank	Ground Steel Tank	Ground Glass-Fused Tank	Elevated Steel Tank
CAPITAL COST	$3,147,000	$3,311,000	$3,950,000	$5,915,500
ANNUAL O&M COST	$4,834	$21,881	$6,743	$28,513
LIFE CYCLE COST	$3,229,000	$3,683,000	$4,065,000	$6,400,000
ADVANTAGES	Essentially maintenance free; Provides critical backup storage for Zone 1	Lowest capital cost; Provides critical backup storage for Zone 1	No coatings necessary; Provides critical backup storage for Zone 1	Can be placed anywhere; No need for long transmission main; No need for land acquisition; Provides critical backup storage for Zone 1
DISADVANTAGES	Requires longest transmission main	Requires periodic coatings; Requires long transmission main	Requires long transmission main	Requires periodic coatings; Access difficult making construction and maintenance more costly

Pumping Station Alternatives

	ALTERNATIVE		
	P-1	P-2	P-3
DESCRIPTION	Relocate Cherry Hills Booster Station	Zone 2 with Murray Heights Booster Station	Zone 2 with Relocated Cherry Hills Booster Station
CAPITAL COST	$289,000	$499,000	$461,000
ANNUAL O&M COST	$0	($500)	($1,200)
LIFE CYCLE COST	$289,000	$490,000	$441,000
ADVANTAGES	Improves overall system pressures w/ least costs; tank does not have to be constructed	Improves overall system pressures; Completely eliminates a booster station	Provides best overall pressures/flows; Completely eliminates a booster station
DISADVANTAGES	Requires additional work to be compatible with Zone 2 Tank	Must be constructed in conjunction with tank	Must be constructed in conjunction with tank

Decision Matrix & Weighting Factors

Weighting Factors

- Life Cycle Costs = 10
- Operation and Maintenance = 7
- Permitting = 4
- Social Impacts = 5
- Environmental Impacts = 5
- Sustainability Consideration = 4
- Land Acquisition = 3

Decision Matrix – Water Treatment Plant

Alternative	Life Cycle Costs		Operation and Mainenance		Permitting		Social Impacts		Environmental Impacts		Sustainability Considerations		Land Acquisition		TOTAL
	Weight: 10		Weight: 7		Weight: 4		Weight: 5		Weight: 5		Weight: 4		Weight: 5		
	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	
Alt T1 - Conventional Treatment with Gravity Settling	4.4	44	10	70	5	20	5	25	5	25	5	20	2	10	**214**
Alt T2A - Conventional Treatment with Tube Settlers	7.0	70	8	56	5	20	5	25	5	25	10	40	5	25	**261**
Alt T2B - Conventional Treatment with Plate Settlers	6.6	66	8	56	5	20	5	25	5	25	10	40	5	25	**257**
Alt T3 - Packaged Treatment - High Rate Settling	2.5	25	4	28	4	16	5	25	4	20	10	40	5	25	**179**
Alt T4 - Packaged Treatment - High Rate Thickening Clarifier	7.5	75	2	14	4	16	5	25	6	30	10	40	5	25	**225**

It is important to note that the above scoring and weighting are subjective. Alternatives that score overall within 10 pts of each other may essentially hold the same degree of preference.

Decision Matrix – Water Storage

Alternative	Life Cycle Costs		Operation and Mainenance		Permitting		Social Impacts		Environmental Impacts		Sustainability Considerations		Land Acquisition		TOTAL
	Weight:	10	Weight:	7	Weight:	4	Weight:	5	Weight:	5	Weight:	4	Weight:	3	
	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	
Alt R-1: Concrete Buried Storage Tank	7.1	71	8	56	5	20	5	25	4	20	5	20	4	12	**224**
Alt R-2A: Ground Level Steel Tank	7.2	72	6	42	5	20	5	25	4	20	5	20	4	12	**211**
Alt R-2B: Ground Level Glass-Fused Tank	6.4	64	7	49	5	20	5	25	4	20	5	20	4	12	**210**
Alt R-3: Elevated Steel Tank	2.8	28	5	35	5	20	4	20	6	30	5	20	8	24	**177**

It is important to note that the above scoring and weighting are subjective. Alternatives that score overall within 10 pts of each other may essentially hold the same degree of preference.

Decision Matrix – Pumping Station

Alternative	Life Cycle Costs		Operation and Mainenance		Permitting		Social Impacts		Environmental Impacts		Sustainability Considerations		Land Acquisition		TOTAL
	Weight:	10	Weight:	7	Weight:	4	Weight:	5	Weight:	5	Weight:	4	Weight:	3	
	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	Score	Wtd.	
Alternatives if tank not constructed															
Alt P-1: Relocate Cherry Hills Booster Station	7.1	71	7	49	5	20	5	25	4	20	5	20	4	12	**217**
Alternatives if tank is constructed															
Alt P-2: Zone 2 with Murray Heights Booster Station	2.9	29	4	28	5	20	5	25	5	25	5	20	6	18	**165**
Alt P-3: Zone 2 with Relocated Cherry Hills Booster Station	3.8	38	7	49	5	20	5	25	4	20	5	20	4	12	**184**

It is important to note that the above scoring and weighting are subjective. Alternatives that score overall within 10 pts of each other may essentially hold the same degree of preference.

Phased Improvements

Phase 3 – Base Project

- T-2A: Conventional Treatment with Tube Settlers
- P-1: Relocate Cherry Hills Booster Station

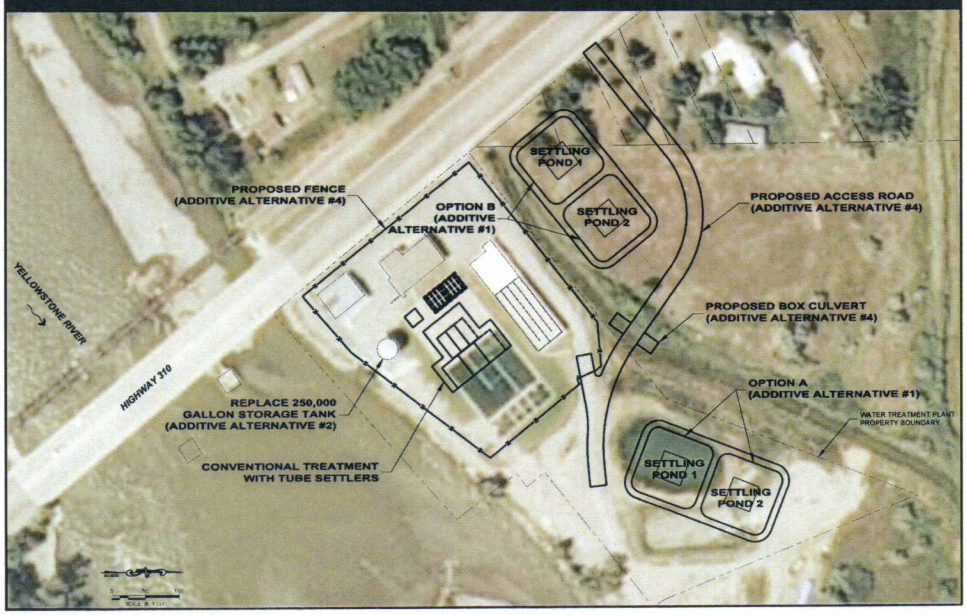
Phase 3 – Additive Alternatives

- WTP-1: Backwash/Sludge Ponds (included)
- WTP-2: 250,000 Gallon Backwash Storage Tank (included)
- WTP-3: Misc. Deficiencies (as funds allow or maintenance)
- WTP-4: Security (as funds allow or separate project)

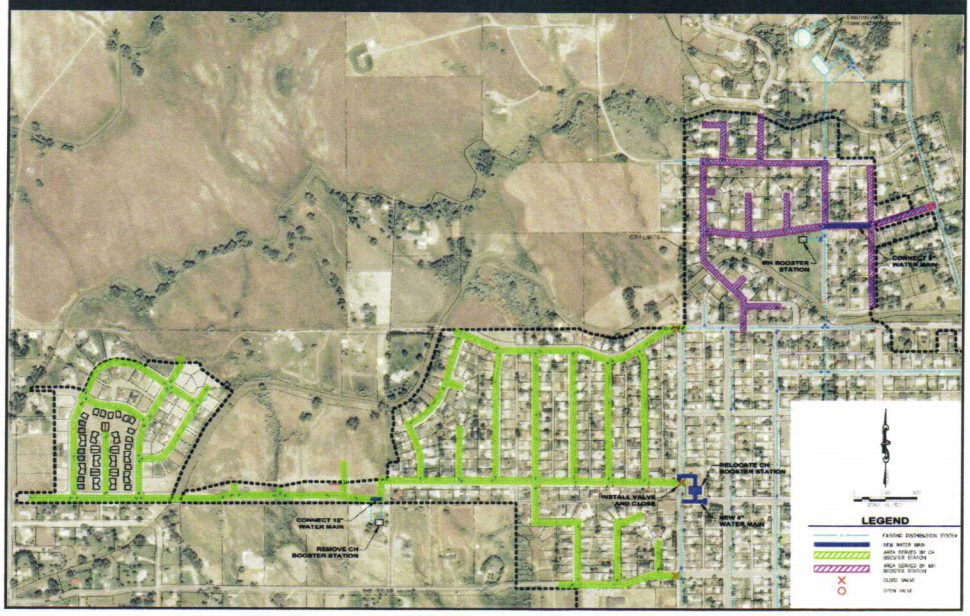
Phase 4 – Future Project

- R-1: Buried Concrete Storage Tank
- P-3: Zone 2 with Relocated Cherry Hills Booster Station

Phase 3 WTP Improvements



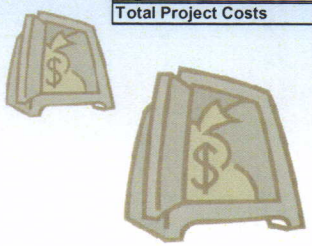
Phase 3 Pump Station Improvements



What does it COST?
How do we PAY for it?

Estimated Costs for Phase 3 Improvements

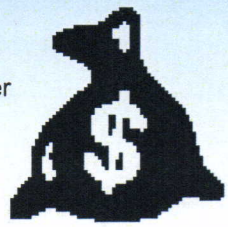
Description	Base Project	Additive Alternatives			
	Tube Settlers + Relocate CH Booster	Sludge/ Backwash Ponds	250,000 Gallon Storage Tank	Misc. WTP Deficiencies	Security
2016 Construction Cost	$ 3,081,000	$ 251,000	$ 491,000	$ 259,000	$ 389,000
Contingency	$ 308,000	$ 25,000	$ 49,000	$ 26,000	$ 39,000
Total Construction Cost	**$ 3,389,000**	**$ 276,000**	**$ 540,000**	**$ 285,000**	**$ 428,000**
Land Acquistion	$ 40,000	$ -	$ -	$ -	$ -
Cultural Resources Survey	$ -	$ -	$ -	$ -	$ -
Geotechnical	$ 10,000	$ 5,000	$ 5,000	$ -	$ 5,000
Engineering	$ 772,000	$ 47,000	$ 108,000	$ 57,000	$ 86,000
Legal and Administrative	$ 68,000	$ 5,000	$ 11,000	$ 6,000	$ 9,000
Total Project Costs	**$ 4,279,000**	**$ 333,000**	**$ 664,000**	**$ 348,000**	**$ 528,000**



Potential Grant Funding & Target Rates

Information On Target Rate Calculation

- Target rates based on median household income (MHI) as determined from 2010 Census
  - Target Rate = $78.40 per month
- Existing Rates (average resident)
  - Water & Sewer Combined = $90.42 per month
- Currently at 115.3% of target rate



Grant Eligibility

- **Community Development Block Grant (CDBG) - $450,000**
  - >50% Low to Moderate Income (LMI)
  - User rate must meet or exceed target rate
  - Requires 25% local match

  Laurel = 48% LMI

- **Treasure State Endowment Program (TSEP) - $500,000 to $750,000**
  - 50-50 match (cannot exceed 50% of project costs)
  - User rate must meet or exceed target rate

  Laurel = 115.3% target rate (before project)

- **Department of Natural Resources and Conservation Renewable Resource Grant and Loan Program (DNRC-RRGL) - $125,000**
  - Conserve, manage, develop, or protect renewable resources

  Project will be managing renewable resources

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Grant Eligibility

- **Montana Coal Board – No limit but generally smaller amounts**
  - Community must show impact from coal development
  - Best chances if in designated Coal Impact area

  May be difficult to show coal impacts

- **Rural Development – No limit but is part of grant/loan combination**
  - Priority given to communities with population < 5,500
  - Amount based upon MHI:
    - MHI < $47,757 up to 45% of project costs grant eligible
    - MHI < $38,205 up to 75% of project costs grant eligible

  Laurel population > 5,500 (not preferred)

  Laurel MHI = $40,906 (could qualify for up to 45% grant)

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Projected Rates from Project Costs (Cost/User)

ITEM	PROPOSED PHASE 3 PROJECT
Total Project Cost	**$5,276,000**
TSEP Grant	$500,000
DNRC Grant	$125,000
City Reserves	$1,500,000
Base SRF Loan (20 Years @ 3%)	**$3,151,000**
SRF Bond Reserve (1 year payment)	$211,747
Total Loan Amount	**$3,362,747**
Annual Loan Payment	$226,029
Annual Loan Coverage	$56,507
TOTAL PROJECT ANNUAL CAPITAL DEBT SERVICE COST	**$282,537**
Additional O&M Due To Project	$32,694
TOTAL PROJECT ANNUAL O&M COST INCREASES	**$32,694**
TOTAL PROJECT ANNUAL COST INCREASES	**$315,231**
USER INCREASE IN COST/MONTH FOR PROJECT [1]	**$7.49**
Existing Average Water User Cost/Month/EDU	$44.63
Total Proposed Water Cost/Month/EDU	**$52.12**
Existing Sewer System Cost/Month/EDU	$45.79
Total Proposed Water & Sewer Cost/Month/EDU	**$97.91**
Combined Systems Target Rate	$78.40
PERCENT OF COMBINED TARGET RATE	**125%**

Actual Impacts to User Rates

- Funding strategy considers only impacts on rates directly attributable to project cost increases
- City has outstanding debts scheduled to be retired in 2017 and 2018
- If City pays off these two outstanding debts prior to project in 2015/2016:
  - Debt service savings should be enough to offset increases of project costs
  - <u>No rate increase should be necessary</u>

Questions?
Comments?

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