

**MONDAY, AUGUST 20, 2018  
CITY COUNCIL**

**Scappoose Creek Project Tour, 6:00 p.m. (They met at Veterans Park, in parking lot, 52590 NW Captain Roger Kucera Way)**

**Present:** Mayor Burge, Council President Reed, Councilor Kessi, Councilor Greisen, Councilor Poling, and City Manager Sykes.

**Also present:** City Planner Laurie Oliver, Public Works Director Dave Sukau.

**CITY COUNCIL MEETING AGENDA  
Regular meeting 7:00 p.m.**

**Call to Order**

Mayor Burge called the meeting to order at 7:04 p.m.

**Pledge of Allegiance**

**Roll Call**

**City Council Members Present:**

Scott Burge	Mayor
Patrick Kessi	Councilor
Megan Greisen	Councilor
Josh Poling	Councilor

**Staff Present:**

Michael Sykes	City Manager
Norm Miller	Police Chief
Susan M. Reeves	City Recorder
Dave Sukau	Public Works Director
Darryl Sykes	Treatment Plant Supervisor

Peter Watts                      Legal Counsel

Press: None

Excused: Councilor Natalie Sanders and Councilor Joel Haugen

**Also present in the audience:** Police Officer Joel Dale, Police Officer Travis Killens, and Consultant Dan Reisinger with Carollo Engineers.

**Approval of the Agenda**

Councilor Greisen moved, and Council President Reed seconded the motion that Council approve the agenda. (Motion passed 5-0). Mayor Burge, aye; Council President Reed, aye; Councilor Kessi, aye; Councilor Greisen, aye, and Councilor Poling, aye.

**Public Comments**

Debbie Reed, Scappoose, explained she was asked to come before Council this evening to discuss a cottonwood tree at Creekview Park. She brought a handout with photos of the tree and

the branches that had fallen. She explained she notified Public Works and they came that day with chainsaws to clean up the branches. She stated there is an issue with this tree, and since the photos were taken two additional branches have fallen, not to the degree that need a chainsaw. She stated now there is another one dangling, ready to fall. She stated we need someone to come out and look at this tree and make a determination, but in the interim, she is not walking that way anymore. She asked for a barrier until the tree is looked at and that other branch is down.

Councilor Reed explained a similar thing occurred at his mother's, and he cut it up and the that branch weighed 1,000 pounds. He explained it was a smaller branch, and the ones at Creekview Park are about twice that size. He thinks it would be a good idea to have an arborist come look at the tree.

Public Works Director Dave Sukau replied this is the first he has heard of it, but we will look into it.

**Consent Agenda ~ June 25, 2018 Special City Council meeting minutes, July 16, 2018 City Council Work Session, July 16, 2018 City Council meeting minutes, appointment of the Park and Recreation Committee members (staggering terms), appointment of Simon Date, South Columbia County Chamber and Paul Peterson Scappoose School District as Economic Development Committee Liaisons, and appointment to the Economic Development Committee (staggering terms)**

Council President Reed moved, and Councilor Poling seconded the motion that Council approve the consent agenda ~ Consent Agenda ~ June 25, 2018 Special City Council meeting minutes, July 16, 2018 City Council Work Session, July 16, 2018 City Council meeting minutes, appointment of the Park and Recreation Committee members (staggering terms), appointment of Simon Date, South Columbia County Chamber and Paul Peterson Scappoose School District as Economic Development Committee Liaisons, and appointment to the Economic Development Committee (staggering terms). (Motion passed 5-0). Mayor Burge, aye; Council President Reed, aye; Councilor Kessi, aye; Councilor Greisen, aye, and Councilor Poling, aye.

### **Swearing in of Municipal Court Judge ~ Cynthia Phillips**

Mayor Burge administered the Oath of Office to Cynthia Philips as Municipal Court Judge.

Cindy Phillips thanked Council for appointing her as municipal court judge.

Council thanked Cindy.

Congratulations Judge Phillips.

### **Presentation to Scappoose Police Officer**

Police Chief Norm Miller explained tonight he wants to recognize Officer Joel Dale and his son. He explained Joel Dale went to a defensive tactic instructors' school and we received a letter from that group, which he read. He explained years ago Joel talked to Norm at a car show and

explained how he wanted to be a patrol officer and how he wanted to work for Scappoose. He explained he has been with Scappoose for almost four years now. He explained on June 23, Officer Dale conducted a premises check under the bridge of Scappoose Vernonia Highway and Highway 30, in which he arrested individuals for offensive littering. He explained on June 24, while off duty Joel Dale and his son, took it upon themselves to go to the location again and clean up the garbage left by the offenders. He believes that the actions by Officer Joel Dale truly go above and beyond the expectations of Officers here at the Scappoose Police Department and is deserving of recognition. He explained tonight Officer Dale is receiving a letter of commendation for his actions for going above and beyond the call of duty on June 24, 2018. He also gave his son a letter of commendation for his actions for going above and beyond as a citizen of the City of Scappoose. He thanked them both for what they have done.

### **Interviews for Scappoose Planning Commission Vacancies**

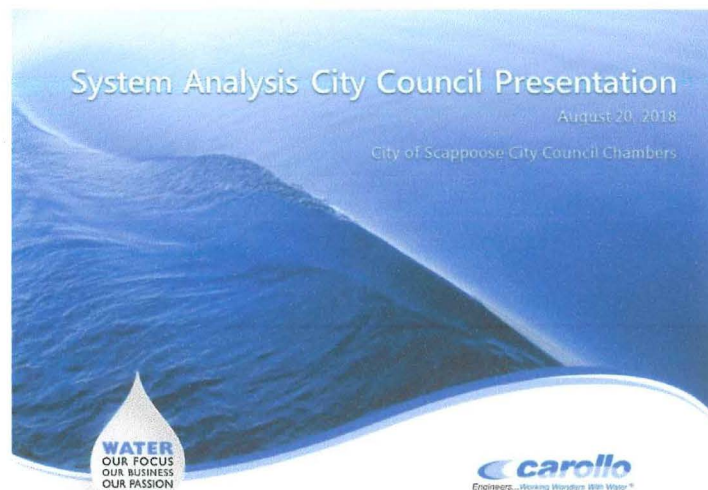
Mayor Burge explained there are openings on the Planning Commission and there are citizens here this evening who have applied for those openings.

Council interviewed Kevin Freimuth first, then Patricia Gibson for the opening positions.

Mayor Burge explained at the next Council meeting he will make recommendations for appointments to the Planning Commission.

### **WORK SESSION ~ Water Master Plan ~ System Analysis Part 2**

Consultant Dan Reisinger with Carollo Engineers and Treatment Plant Supervisor Darryl Sykes went over the System Analysis presentation.



## Water System Analyses

- Capacity Analyses
- Condition Evaluation
- Supply Decisions
- Next Steps

## Water System Analyses

- Capacity Analyses
  - Storage
  - Distribution System
- Condition Evaluation
- Supply Decisions
- Next Steps

## Storage analysis considers normal and emergency operations



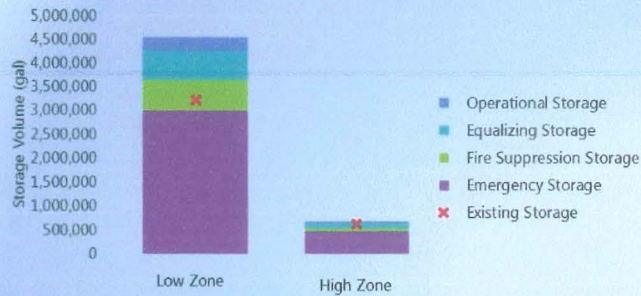
Figure 6.1 Storage Components

Storage  
emergency



## New Storage needed at Keys Road; Belle Vista Reservoirs are sized for future

Projected Storage Volume Needs (2038)



## Hydraulic Model simulates water system under "what if" scenarios

- Min. and Max. Pressure
- Fire Flow
- System Expansion
- O&M Activities
- Energy Efficiency



## Model calibrated to match actual system performance under "stress"



Low Zone (tan) has good pressures during normal operations;

High Zone (green) tends to have higher pressures due to topography



### Fire flow requirements set by land use

- Residential: 1,000 gpm
- Commercial: 2,000 gpm
- Industrial: 3,000 gpm
- Fire flow requirement can exceed existing building need



### System generally provides required fire flows

- Only deficient areas are marked
- Colored pipes have increased risk of maintenance



## JP West deficiencies resolved by upsizing Eastview Dr.



## Water System Analyses

- Capacity Analyses
- Condition Evaluation
  - WTP
  - Pipelines
- Supply Decisions
- Next Steps




## Rehabilitation of existing infrastructure determined through high-level condition assessment

- Site Tour
  - Surface water intakes
  - Keys Road WTP
  - Miller Road WTP
- GIS Based Analysis
  - Pipeline Remaining Useful Life



## Water treatment plant rated from positive (Green) to negative (Red)

Table 5.7 Facility Evaluation Criteria

Assessment Category	Positive 	Neutral 	Negative 
Seismic/Life-Safety Condition	Structurally sound; no noted historical failure in mechanical equipment; facility is in great condition relative to its age.	Structural condition is moderate; mechanical components serviceable, but they consistently require maintenance; facility is in moderate condition relative to its age; no signs of failure in structures or mechanical equipment.	Visible structural or imminent mechanical failure; facility is in poor condition relative to its age.
Capacity	Has historically met demands; can meet true design capacity.	Has historically met demands; likely unable to meet true design capacity/future plant demands.	Limited capacity that has historically not met demands or is unable to meet true design capacity/future demands.
Plant Performance Optimization	Has historically met performance goals.	Has historically met performance goals with increased operational/maintenance attention.	Has had significant historical performance issues; unable to meet performance goals.
Reliability/Redundancy	Has sufficient redundancy/firm capacity; both structural and mechanical elements are proven reliable; likely able to handle anticipated future emergency/failure events.	Has limited redundancy; structures or mechanical equipment have not proven to always be reliable, but likelihood of emergency/failure is moderate.	Has limited or no redundancy; structures or mechanical parts have history of failure; low likelihood of handling a future emergency/failure event.













































## Miller Road WTP provides the system long-term Iron and Manganese treatment

Table 5.9 Miller Road Water Treatment Plant Assessment Summary

Facility	Condition	Capacity	Plant Performance Optimization	Reliability/Redundancy
Groundwater Wells				
Chemical Systems				
Filters No. 1 & 2				
Backwash Basin				
Booster Pump Station				
Power Supply				
Laboratory		N/A		

## Keys Road Treatment Plant aging and in need of rehabilitation

Table 5.13 Keys Road Water Treatment Plant Assessment Summary

Facility	Condition	Capacity	Plant Performance Optimization	Reliability/Redundancy
Surface Water Intake		TBD		
Surface Water Transmission				
Groundwater Wells				
Chemical Systems				
Direct Filtration Plant				
Greensand Filter				
Booster Pump Station				
Backwash Pump Station				
Finished Water Reservoirs				TBD
Power Supply				
Admin and Operations		N/A		
Laboratory		N/A		



## Plan provides recommendations to aid in implementing Keys Road WTP rehabilitation

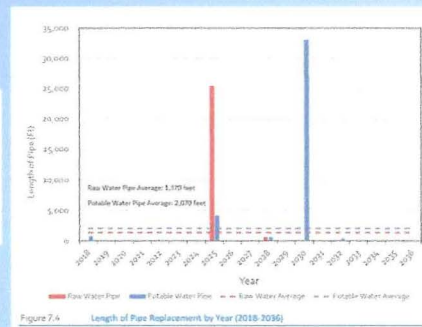
Table 5.1.5 Keys Road Water Treatment Plant Recommended Improvement Alternatives Summary

System	Recommendations
Surface Water Intake	<ul style="list-style-type: none"> <li>Implement seismic improvements to accommodate a future emergency release event.</li> <li>Implement a flow monitoring program to evaluate system capacity.</li> </ul>
Surface Water Transmission	<ul style="list-style-type: none"> <li>Replace/resize the pipe when it reaches the end of its usable life.</li> <li>Optimize the operations of preliminary sedimentation to improve system performance.</li> </ul>
Groundwater Wells	<ul style="list-style-type: none"> <li>Continue developing the new well.</li> </ul>
Chemical Systems	<ul style="list-style-type: none"> <li>Replace the caustic soda tank to address corrosion control issues.</li> <li>Incorporate spill containment to address safety challenges for plant staff.</li> <li>Identify and procure critical spare parts and provide chemical storage to improve redundancy/resiliency.</li> </ul>
Direct Filtration	<ul style="list-style-type: none"> <li>Conduct a performance optimization study.</li> <li>Determine whether the plant is part of long-term strategy.</li> </ul>
Greensand Filter	<ul style="list-style-type: none"> <li>Provide cover to improve the facility's condition.</li> <li>Conduct filter optimization study to further evaluate performance.</li> </ul>
Booster Pump Station	<ul style="list-style-type: none"> <li>Optimize pump station operations based on demand forecast.</li> <li>Potentially replace fire pump to improve performance.</li> </ul>
Finished Water Reservoirs	<ul style="list-style-type: none"> <li>Install air vacuum release valve at high point in pipe to resolve monitoring issues.</li> </ul>
Laboratory	<ul style="list-style-type: none"> <li>Consider testing both raw and finished water manganese.</li> <li>Consider adding an ORP sensor to the plant effluent to monitor permanganate.</li> </ul>

## Pipeline replacement planned based on remaining useful life

Table 7.3 Useful Life of Pipes

Pipe Material	Useful Life (years)
Cast Iron (CI)	75
Ductile Iron (DI)	85
Galvanized Iron (GI)	50
HDPE	100
PVC	75
Steel	70
Unknown	50



## Replacement activities focused in older City center and surface water raw water main



Surface raw water main replacement costs, combined with Keys Road WTP condition, warrant careful consideration of future use



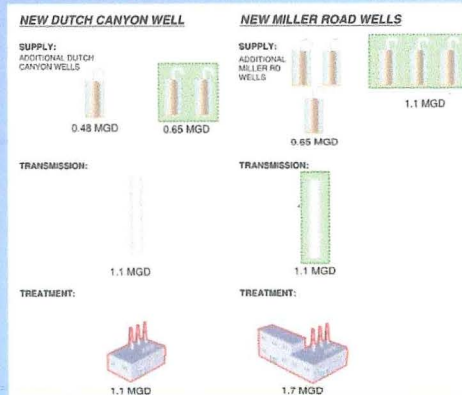
## Water System Analyses

- Capacity Analyses
- Condition Evaluation
- Supply Decisions
  - Short-term
  - Long-term
- Next Steps

## New water supplies needed in 2031

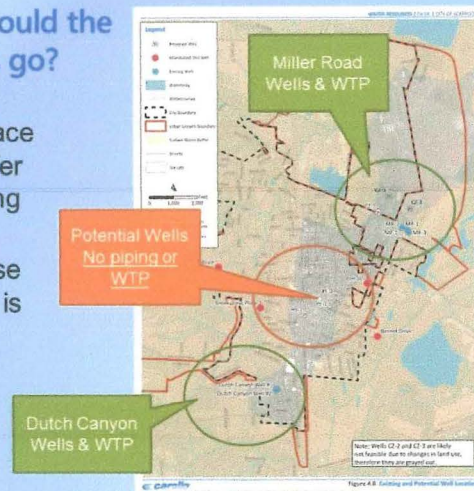


## New wells make best use of existing infrastructure



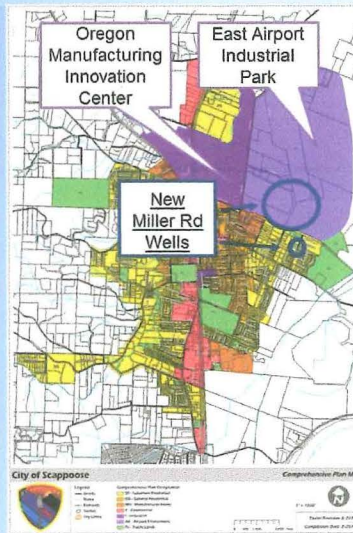
## Where should the new wells go?

- ¼ mi surface water buffer very limiting
- Iron & Manganese treatment is required



## Three new Miller Road Wells needed in next 10 years

- East Airport Developer will provide land for two wells
- Potential to Place Well near Miller Park
- Wellhead protection should be considered



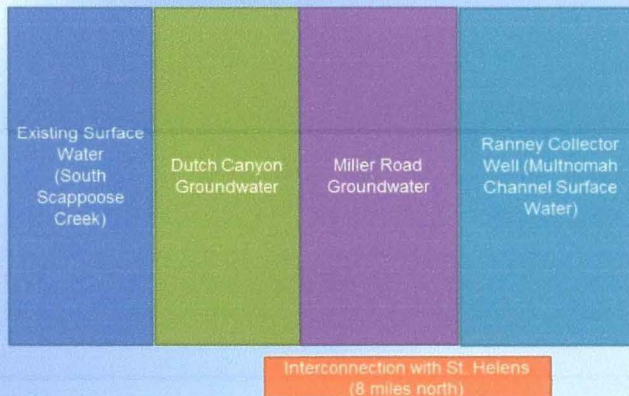


### Third Dutch Canyon Wellfield expansion will require new land

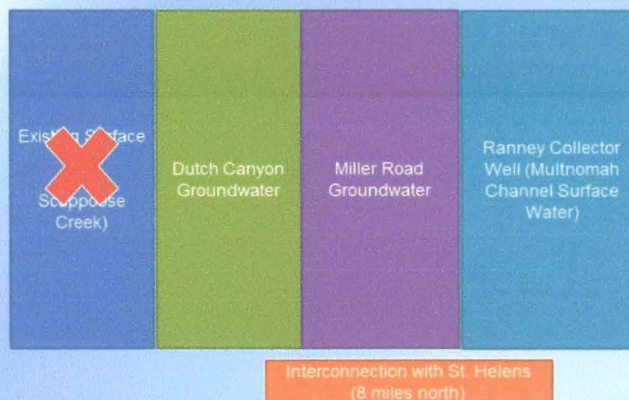


Figure 4-4 Dutch Canyon Wells and Surrounding Area

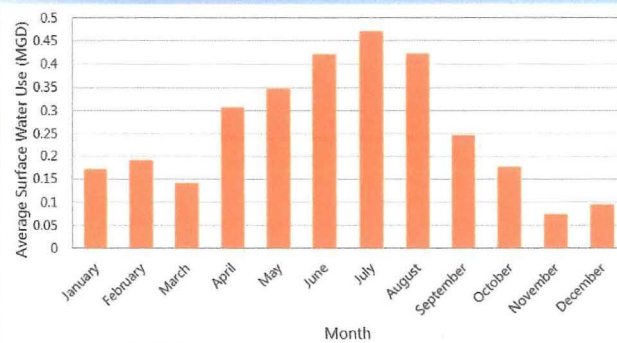
### What are future major supply sources?



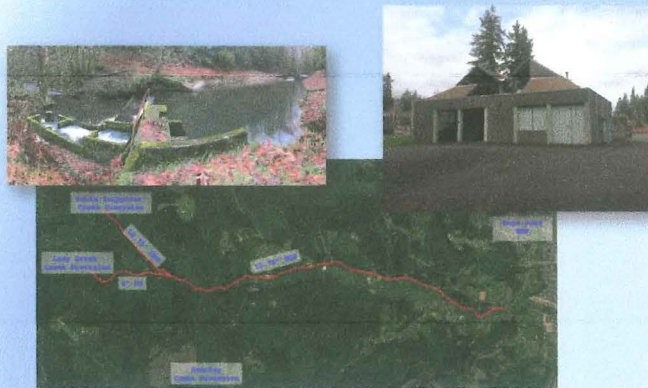
### What are future major supply sources?



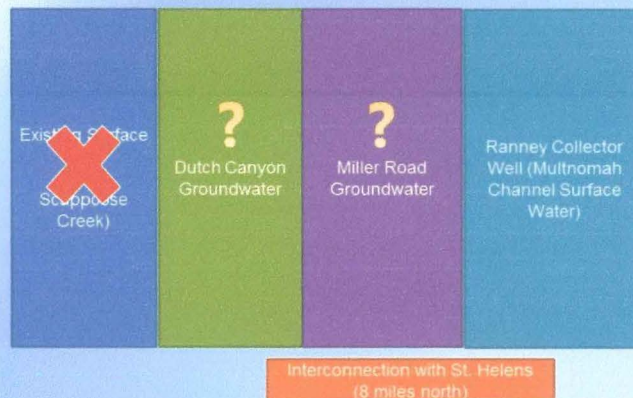
### Limited new supply during critical summer period



### Existing surface water infrastructure needs rehabilitation



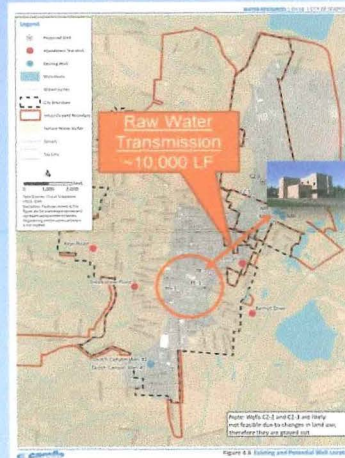
### What are future major supply sources?





## Other well locations require long conveyance

- Limited Redundancy
- Unknown water quality
- Red dots are locations of previously abandoned wells



## Collect additional information as City complete new wells

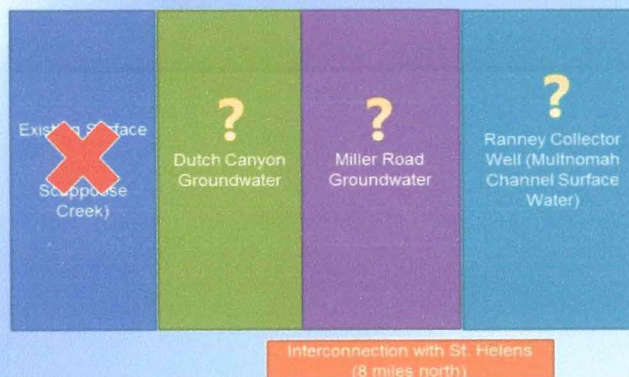
- Highly sensitive to the location and yield of groundwater wells

– Existing Well Yields = 5 new wells?

OR

– 40% greater yield = 3 new wells ✓

## What are future major supply sources?





## Ranney Well collects water from shallow aquifers near rivers



<https://www.ci.st-helens.or.us/dwfp/page/what-ranney-collector-well>

## Ranney well is a balance of available supply and water quality

### South Scappoose Creek

✗ Limited Supply

↑ Good Water Quality



### Multnomah Channel

↑ Available Supply

↓ Unknown Water Quality



John Prazan, 2016

## What are future major supply sources?



Interconnection with St. Helens (8 miles north) ✓

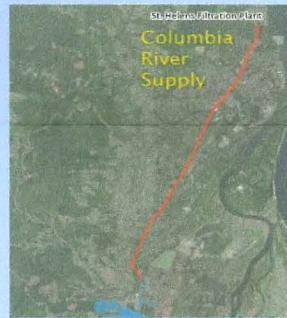
## Long transmission length makes St. Helens interconnection less compelling

### Benefits

- Proven Supply
- Shared O&M

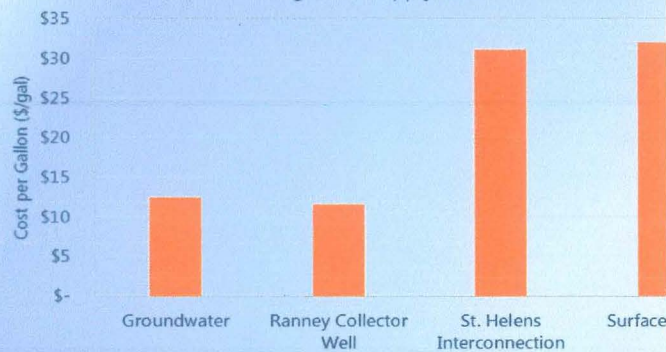
### Challenges

- Single Line
  - Limited redundancy
- Water age
- Cost of transmission



## New groundwater wells or a Ranney well have the least cost per gallon

Long-Term Supply Costs



## Action Items defined for City to investigate future supplies

Table 4.22 Summary of Action Items for Developing Future Supplies

Supply Option	0 - 2 Years	2 - 5 Years
Existing Surface Water Supplies	Measure streamflow at existing diversion structures.	Perform leak detection on raw water transmission main. Install pigging ports for sediment removal. Perform life-safety and other rehab improvements to Keys Road surface water facility.
New Miller Road Wells	Drill test well at MP-1 site.	Acquire property and drill test well for C2-1 well. Drill test well for high school/elementary school well. Perform life-safety, seismic, and other repair improvements to existing Miller Road WTP.
New Dutch Canyon Well	Finalize combined production capacity from existing Dutch Canyon wells.	Acquire property for third well site. Perform life-safety, seismic, and other repair improvements to existing Keys Road groundwater treatment. Investigate construction of a high-rate iron and manganese system at Dutch Canyon site.
New Ranney Collector Well		Drill a test well to determine hydrogeological feasibility. Perform water quality sampling for test well and Multnomah Channel.
Interconnection with St. Helens		Determine buy-in and other costs associated with the St. Helens Ranney Well. Work with NW Natural to identify transmission project and right-of-way. Determine buy-in and other costs associated with water transmission.

## Water System Analyses

- Capacity Analyses
- Condition Evaluation
- Supply Decisions
- Next Steps

## Next Steps

- Complete financial analysis of Water System Plan Capital Improvements
- Present Financial Analysis to the City Council
- City Council to approve sending Agency Draft Plan to Regulator review
- Regulatory review and comment

## Next S

- Comp
- Capita
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- City Co
- Regula
- Regula

Council thanked Dan and Darryl.

### **Announcements ~ information only**

### **Calendar**

Mayor Burge went over the calendar.

### **City Manager, Police Chief, Councilors, and Mayor**

City Manager Sykes explained he learned a long time ago that you are only as good as the team that you have and he feels real fortunate in Scappoose that we have a really great staff, that is really jelling as a team and we are all on the same page, and focused on the goals set by the Council, and it really makes his job easy to have talent like that. He talked about how successful the National Night Out was, and stated Norm has done a lot of great work building support with the community by holding events like that. He explained Dave has been with us a year and a half



and it is amazing to see what he is doing with our Public Works Department. He explained Public Works has a new employee Scott Jauron, who was previously with the City of St. Helens, and we were lucky enough to have him apply for an opening we had. He explained tomorrow they break ground on Chief Concomly Park. He talked about improvements happening at Miller Park. He explained staff will be doing an overlay on EM Watts all the way to Dutch Canyon, which is long overdue. He explained Dave has really helped build the partnership with Columbia County, which is really important. He explained last Friday staff met with PCC and they are really excited to move forward. He explained fall of 2020 is when they want to have a facility up and operating. He explained the City will be doing a community survey in the next month or so, if there are any questions you want us to ask the community, let us know. He explained the Council should be congratulated for your contribution to the movie night in Heritage Park.

Police Chief Norm Miller explained National Night Out was a huge success. He explained Red Apple provided a lot of our food and materials. He explained we went through 200 hamburgers in an hour and fifteen minutes. He explained there were approximately 500 people who attended, and it was a blast. He met a lot of people who are new to Scappoose. He explained their back to school event they normally have will be held at a home football game.

Public Works Director Dave Sukau explained the street sweeping schedule for October will hopefully be out in the next couple of weeks. He explained Charles T. Parker Way road should commence any day now.

Councilor Kessi explained they had a Traffic Safety Committee meeting today and there are a couple of areas close to the schools that will hopefully have some additions to help kids get to school safer. He explained they have a meeting setup with an architect, who is an urban planner, for next Thursday.

Councilor Greisen explained she feels proud to be part of a team that works so well together, and everything that Public Works is doing at the parks and being resourceful, she just really appreciates that. She stated you just value where you live, and she notices that a lot about the public. She explained when people can see that we want it to be a better place, she feels proud of that. She stated Wings and Wheels was great, thank you Mayor Burge.

Mayor Burge talked about the County Wide Tourism meeting he attended. He explained Wings and Wheels was a success. He explained they had raffle items, and one of them was for the opening game to the Ducks, which he also got a football to go with it. He explained there was a young man that kept coming back to buy more and more raffle tickets to win this prize. He explained he and Kevin were doing the drawing and they were hoping they might draw his ticket, and they did. He explained he spoke to the young man afterwards and he was so excited and explained his dad went to University of Oregon and he is a huge fan and always watches the game on tv. The young man sent his dad a message and asked him if he was going to watch the home opener on tv, knowing he would say yes, and the kid said, "no you are not, you are going to Eugene with me to watch it".

Mayor Burge said it was so cool to see this young man win tickets, so he could take his dad.

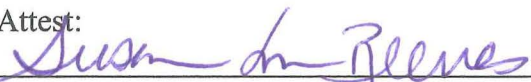
Mayor Burge explained they are already working on what they can do next year to make it an even better event.

### **Adjournment**

Mayor Burge adjourned the meeting at 8:49 p.m.

  
\_\_\_\_\_  
Mayor Scott Burge

Attest:

  
\_\_\_\_\_  
City Recorder Susan M. Reeves, MMC