GOLD BAR COMMUNITY OPEN HOUSE – JUNE 25, 2019 - WHAT WE HEARD REPORT

CONTENTS

OPEN HOUSE DETAILS

EPCOR invited members of the public to take part in an open house pertaining to future development and ongoing operations at the Gold Bar Wastewater Treatment Plant (GBWWTP). The focus of the engagement session was to provide an update to the community and gather input and feedback.

EPCOR hosted the open house on June 25, 2019 from 3:00-8:00 p.m. at the Highlands Golf Club. There were 17 EPCOR representatives with a variety of professional backgrounds in attendance. EPCOR employees represented different internal groups such as public and government affairs, operations at GBWWTP, project managers and directors.

Approximately 70 participants attended the open house. The general sentiment, input and feedback provided by the public was neutral to positive.

WORK COMPLETED WITH THE COMMUNITY PRIOR TO THE OPEN HOUSE

In early 2019, EPCOR reached out to the community and stakeholders around the Gold Bar Wastewater Treatment Plant (GBWWTP) to understand how we could better operate our facility and plan for future projects while still meeting the needs of the broader Edmonton population and Gold Bar's ongoing operations.

EPCOR organized a subcommittee of citizens called the Citizen Planning Committee (CPC) to take part in three community workshop sessions focused on engaging with participants on operations at the GBWWTP. During the open house EPCOR provided a summary of the work that had been completed with the CPC. Copies of the What We Heard Reports from these workshops can be found online at www.epcor.com/goldbar.

INVITATION

EPCOR distributed invitations to the open house in several different ways including mail, web content and email. Copies of the invitation can be found in Appendix A, the invitation was distributed as follows:

- A neighborhood postcard was distributed to approximately 24,000 customers residing near GBWWTP in the communities of Gold Bar, Capilano, Highlands, Beverly Heights, Ottewell and Fulton Place.
- Copies of the postcard were available at EPCOR's booth at the Highlandia festival on June 15, 2019.
- An advertisement was posted on www.epcor.com/goldbar.
- EPCOR emailed invitations to all members of the Citizen Planning Committee, recreational groups that use Gold Bar Park, Community Leagues and all stakeholders who reached out to EPCOR to provide feedback or communicate concerns regarding the originally proposed GBWWTP Operations Centre Project and Parking Lot project.

OPEN HOUSE PURPOSE, OUTCOMES AND OUTPUTS

During the open house, EPCOR demonstrated their commitment to keeping all future development within the existing fenceline at GBWWTP and participants had the opportunity to provide input and feedback on:

- Shared goals (outcomes) between EPCOR and the surrounding community, which were developed in conjunction with the Citizen Planning Committee (CPC).
- Design Principles to guide future development at the GBWWTP (which were developed in conjunction with the Citizen Planning Committee (CPC)).
- The proposed public engagement framework, (which was developed in conjunction with the Citizen Planning Committee (CPC)) will guide how EPCOR interacts with the community on projects and operations at GBWWTP.
- Long-term planning at GBWWTP (which was reviewed with the Citizen Planning Committee prior)
- Employee safe movement and hygiene plan (parking lot & operations centre project) (which was reviewed during the Citizen Planning Committee (CPC)) workshops).
- Odour reduction plan (which was reviewed during the Citizen Planning Committee (CPC)) workshops) .
- Renewable energy and flaring reduction (which was reviewed during the Citizen Planning Committee (CPC)) workshops).

PURPOSE

- Inform stakeholders of all of the above and discuss their input, feedback and concerns.
- Provide stakeholders with opportunities to:
    - ask questions (about the project, future plans, EPCOR & Gold Bar).
    - express concerns and raise issues.
    - discuss options, alternatives and mitigation measures.
- Document any concerns or issues raised.
- Communicate that EPCOR will work directly with stakeholders throughout the process to ensure their feedback is understood and considered. EPCOR also reiterated that public feedback will be reflected in the alternatives developed and we will share how public input influenced the decision.

OUTCOMES

Participants will have an opportunity to:

- Provide feedback on Shared Outcomes, Priority Actions identified through our public engagement efforts, Design Principles, and Public Engagement Framework.

- Learn about the Public Engagement Framework that was created with the CPC for operations and planned work at Gold Bar.
- Learn about EPCOR's Community Liaison Committee (CLC) and an opportunity to join the committee.
- Provide feedback on our plans to accommodate any future treatment needs at the plant with minimal impacts to the surrounding community.
- Provide ideas and feedback on four different projects at GBWWTP: long-term planning, hygiene & safety, odour action plan and renewable natural gas.

OPPORTUNITIES FOR ENGAGEMENT

At the welcome table, EPCOR explained to participants that they had the following options for engaging with EPCOR in regards to the information shared at the open house:

- Passive Engagement – Participants had the option of looking at panels and leaving comments on Graffiti Boards.
- One-on-One Engagement –Participants had the option of sharing their feedback directly with an EPCOR representative.
- Facilitated Discussion – Participants could join a facilitated table discussion to provide input (discussion anticipated to take approximately 15 minutes).

OPEN HOUSE CONTENT

EPCOR prepared open house panels (see Appendix B for copies of the panels) pertaining to the following main topics:

- Work completed with the community prior to the open house.
- Planning for the long term.
- Shared goals (outcomes) between EPCOR and the surrounding community.
- Design Principles that will guide future development at the Gold Bar Wastewater Treatment Plant (GBWWTP).
- The Community Liaison Committee (CLC).
- A proposed public engagement framework, which will guide how EPCOR interacts with the community on projects and operations at GBWWTP.
- Long-term planning at GBWWTP.
- Employee safe movement and hygiene plan (parking lot & operations centre project).
- Odour reduction plans.
- Renewable energy and flaring reduction.

HOW WE PLAN FOR THE LONG TERM

EPCOR had materials prepared that explained the long-term planning process at the GBWWTP. More specifically, EPCOR explained the Integrated Resource Plan (IRP) and how the planning document takes into consideration input from the community, aligns with shared outcomes (goals)

between EPCOR and the community, is continuously updated, outlines the factors taken into consideration in the planning process and describes the budget allocated for specific areas of future investment at Gold Bar WWTP.

SHARED OUTCOMES (GOALS)

EPCOR presented the following Shared Outcome Statements that were developed by EPCOR and the CPC. The Shared Outcome Statements represent shared goals that both EPCOR and the community can agree to upholding.

QUALITY OF LIFE

The Gold Bar WWTP is operated, maintained and updated in a way that reduces impacts to stakeholders and improves quality of life, including odour, noise and enjoyment of parks and recreation.

SAFETY

Community, public and worker safety and health are protected.

RELATIONSHIP

An honest, transparent, trusting and respectful long-term relationship is developed between EPCOR and Gold Bar WWTP stakeholders.

ENVIRONMENT

Pollution is prevented. The impact of the Gold Bar WWTP on air, land, water, climate and ecosystems is reduced.

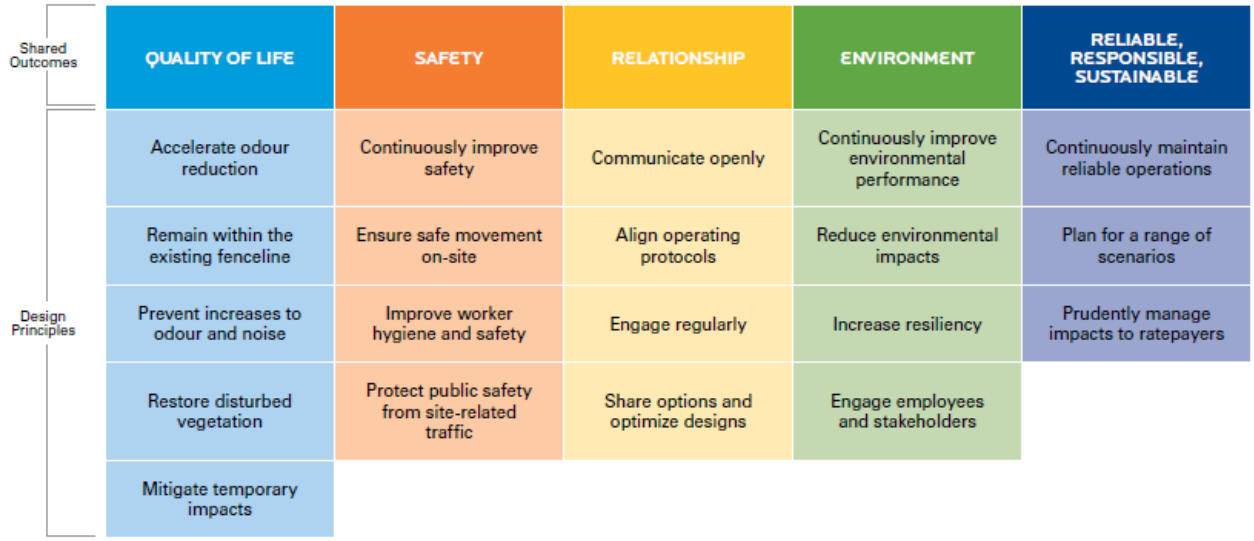
RELIABLE, RESPONSIBLE AND SUSTAINABLE

The Gold Bar WWTP is designed, maintained and operated in a prudent and responsible manner.

DESIGN PRINCIPLES

EPCOR presented the Design Principles created with the CPC (as seen in the image below), which define how EPCOR will achieve the goals described in the five Shared Outcome Statements and provide a framework to guide the evolution of the GBWWTP site. EPCOR also communicated that the Design Principles would be included in our long term planning document, the Integrated Resource Plan (IRP).

A graffiti board was presented at the open house for participants to leave feedback regarding the Shared Outcome Statements and Design Principles.



COMMUNITY LIAISON COMMITTEE (CLC)

EPCOR had a panel board regarding the Community Liaison Committee (CLC), which is specific to the ongoing operations of the GBWWTP and has been operational for over ten years. EPCOR explained that the purpose of the CLC was to offer the opportunity for members to learn and provide feedback regarding EPCOR's provision of reliable and high-quality water and wastewater services. EPCOR reiterated that the CLC is a very important link to the communities surrounding the GBWWTP and communicated that two spots were still available. It was also advertised that if open house participants were interested in joining the CLC, they should notify an EPCOR representative.

PUBLIC ENGAGEMENT FRAMEWORK

During the open house, EPCOR also presented a draft Public Engagement Framework that was collaboratively created by EPCOR and the Citizen Planning Committee (CPC). The spectrum (as seen below) was developed to guide public engagement for operations and planned work at the Gold Bar Wastewater Treatment Plant (GBWWTP).

	Communication will be an important component for all levels of engagement				
		Public Engagement			
	Communications (Inform, listen and Learn)—will be an important component for all levels of Engagement	**Advise (Share info)**	**Refine (Work together and build a plan)**	**Create (Work side by side and build a shared plan)**	**Decide (You decide)**
EPCOR's Commitment	- We will keep you informed - We will respond in a timely manner and resolve issues - We will ensure the safety of residents through the dissemination of information about possible danger and emergency response procedures - We will inform the community about activities at the site that have impacts on traffic, noise, etc.	We will listen to and acknowledge concerns and aspirations and share how public input (if received) influenced the decision.	We will work **directly with you throughout the process** to ensure your feedback is understood and considered. We will ensure that your feedback is **directly reflected in the alternatives** developed and share how the public input influenced the decision.	We will partner with you in each aspect of the decision including the **development of alternatives and identification of the preferred solution.** We will look to you for **advice and information in formulating solution and incorporate** your advice into the decisions to the **maximum extent possible.**	We will place **final decision making** in your hands. We will implement what you decide.
Why	To provide you with information to assist you in understanding the problem, alternatives, opportunities and/or solutions. This will also be a mutually satisfactory process for identifying, investigating and responding to complaints and concerns regarding operations.	To assist you in understanding what we do and why we are doing it. Flag any concerns prior and consider them in the plan.	To obtain your input on problems, alternatives, opportunities and/or solutions.	To obtain your input on every aspect of the work and involve you in complex discussions that may impact your community.	To have you lead on community initiatives.
When	Before and at the beginning of ongoing operations, projects, long-range planning, and operational issues (e.g. odour reporting on website, increased traffic, unplanned maintenance issue leading to odours).	During ongoing operations, and for small, low-impact projects (e.g. crane on site, planned maintenance work leading to odours).	For medium-impact projects, long-range planning and one-off operational issues (e.g. odour monitoring - location of equipment, planned work outside fenceline leading to trail closure in summer for 2 weeks).	For major stakeholder impacts related to multiple shared outcomes. An example may be perimeter signage (e.g. review perimeter signage - safety and interpretive in nature).	For community based projects (e.g. New MT bike trail through GB land).
How (Suggested Techniques)	- Newsletters - Social Media - Interviews - Websites - Community Newspapers - Signs in Gold Bar Park - Facility Tour - Through partners (e.g. community leagues)	- Survey - Newsletters - Social Media - Interviews - Websites - Focus Groups - Open House - Signs in gold bar park - Community Liasion Committee (CLC) - Community Newspaper	- Survey - Interviews - Focus Groups - Online Engagement - Open House - Workshop - Pop-up engagement in Gold Bar Park - Community Liasion Committee (CLC)	- Workshop - Drop-in Engagement - Community Liasion Committee (CLC)	- Workshop - Drop-in Engagement - Community Liasion Committee (CLC)

A graffiti board was present at the open house for participants to leave feedback regarding the Public Engagement Framework.

LONG-TERM PLANNING AT GBWWTP

EPCOR had a series of panels that provided an explanation of how GBWWTP will accommodate future flows. EPCOR communicated that the Gold Bar WWTP is able to safely treat all flows that come to it through 2060 while remaining within its existing footprint and fenceline.

The following additional information was presented and addressed future liquid flows, solids and nutrients:

1. Gold Bar WWTP has ample hydraulic capacity meaning that it is currently sized to handle liquid flows through 2060. Growth in sanitary flows is expected to be flat due to the impact of water conservation.
2. Gold Bar WWTP also has spare solids treatment capacity in the digesters on site to treat solids growth through 2060. Solids loading to the plant is expected to increase in proportion to population growth.
3. As the amount of municipal waste grows with population and flows are moderated due to water conservation, wastewater strength is expected to increase over time. Gold Bar WWTP will have to increase its nutrient removal capacity to keep pace. This is accomplished by retrofitting existing secondary clarifier tanks with membrane technology. Current projections indicate that the earliest this would be needed is 2027. These retrofits will be required at a slower pace if future growth in sanitary flows from the SESS system is redirected to Alberta Capital Region Wastewater Commission.

Starting in 2027 EPCOR will start retrofitting existing secondary clarifier tanks with membrane technology.


Membrane technology that would be inserted into existing tanks.

EPCOR also provided content pertaining to some common questions heard throughout the community, including:

- Future flows
    - There is no physical expansion of Gold Bar WWTP planned or proposed. We have a long-term plan in place to stay within the existing fenceline/footprint of the plant. We are not removing any trails or parkland space.
    - We plan to increase our capacity for treatment over time by retrofitting existing tanks at the plant. These retrofits will be required regardless of where the future SESS flows are directed. EPCOR already treats wastewater from the SESS service area today through existing sewer systems which are routed to the plant.

- Buffer Zones and Setbacks
    - The Gold Bar WWTP is 100% compliant with the applicable AEP standards and guidelines and continues to meet or exceed environmental standards.
    - The sole intent of the 'buffer zone' is to prevent the occurrences of objectionable odours and it only applies to new facilities.
    - We have achieved significant reductions in odour over the last 20 years and continue to invest in odour management and monitoring systems to demonstrate our commitment to continuous improvement and compliance with Alberta ambient air quality objective at all times.

SAFETY & HYGIENE

EPCOR presented materials that communicated a need to provide on-site parking for employees and contractors located away from active treatment areas, process areas and near the work place. We also communicated a requirement to plan for facilities that allow employees to: keep street clothes and personal items separate from Personal Protective Equipment (PPE) and work clothes; shower and hand wash after contact with wastewater; and store clothing coming into contact with wastewater in an appropriate locker room area.

EPCOR provided a notification to the community and recreational groups in the area and hosted an open house sharing our initial design in February 2018. The original design solution for the parking lot, operations centre and associated rezoning, generated feedback and we listened to the community to adapt our approach. The current recommended design solution to meet the objectives listed above was presented to the CPC group and also at the Open House.

Recommended Option – Inside Fence at East End of the Site

Parking

- Build a 150 stall surface parking lot at east end, and use 45 stall surface lot stalls in the south-central area near the new Ops Centre. Reduce the laydown area.

Buildings

- Operations Centre: one story, inside the fenceline.
- Maintenance/Admin offices moved from the centre to the east end, inside the fence.

Other

- City Parks Yard and Nordic Ski Club unchanged. No development outside the existing fenceline. Main entrance moved to east end of site (arriving vehicles will now use Gold Bar Park Road; exiting vehicles are unchanged).

A graffiti board was present at the open house for participants to leave feedback regarding the design elements that should be reflected in the proposed parking feature and operations centre.

ODOUR ACTION PLAN

EPCOR had materials that outlined recent investments to reduce odours on site, future additional odour projects and plans to install a new continuous air monitoring station in coordination with Alberta Environment and Parks. EPCOR also sought input from participants on where the continuous air monitoring station should be located as the facility needs to be located outside the current fenceline between the GBWWTP and the nearest receptors (homes along 109A Avenue).

RENEWABLE NATURAL GAS

EPCOR also presented information pertaining to plans to reduce flaring and green house gas (GHG) emissions at GBWWTP. The following background information was communicated:

- Biogas is a by-product of wastewater treatment (mostly solids digestion).
- Today, about 44% of the biogas generated in the solids digestion process at Gold Bar is used for heating. About 56% is flared.
- Flaring volumes are highest in the summer months, when there is less need to use gas on-site for heating (70% flared).

EPCOR also explained that rather than flaring, technology exists to capture biogas, clean it, and deliver it into the ATCO natural gas distribution system as a source of renewable natural gas. Upgrading biogas to renewable natural gas would require some additional biogas cleaning and injection equipment onsite, and making an underground connection to the ATCO gas line that runs next to Gold Bar Park Road.

EPCOR presented project plans (as seen below) associated with the biogas project, which included:

- The siting of all equipment within the fenceline, and as much as possible within enclosures to minimize noise and visual impact.

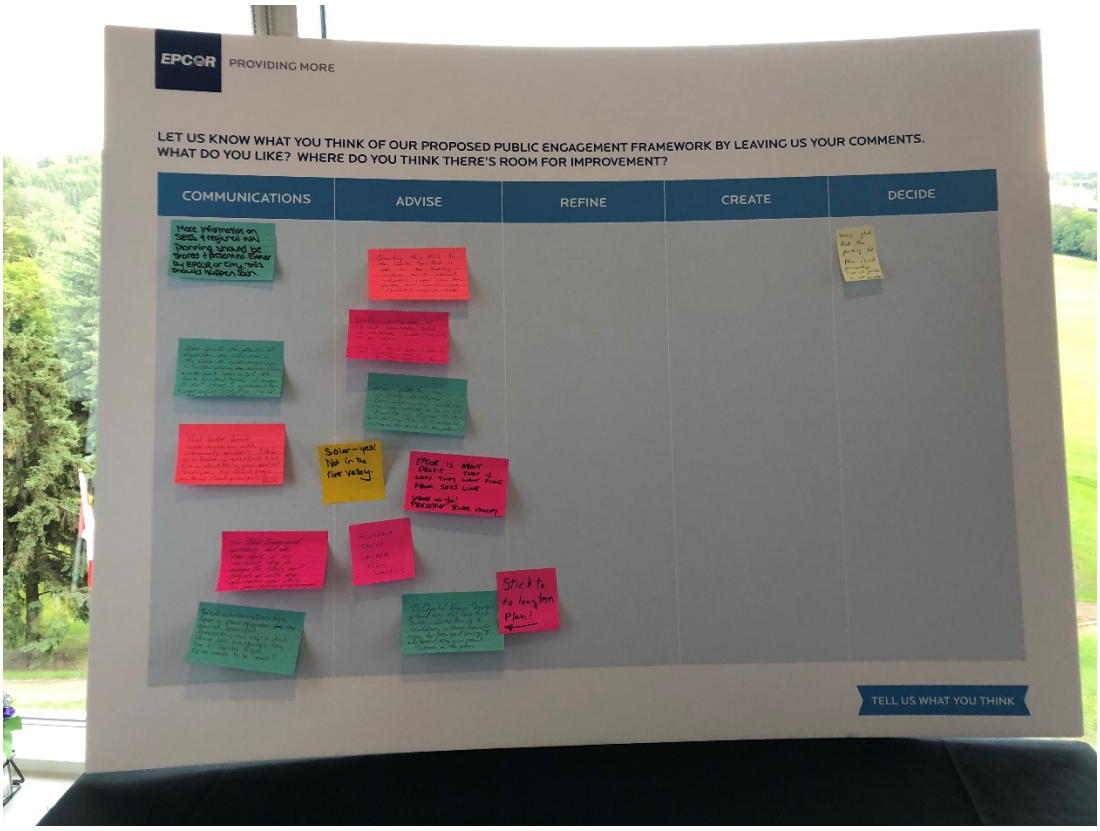
- The underground connection to the ATCO gas system could have temporary construction impacts at the east end of Gold Bar Park, and may affect trees which would need to be replaced.
- Key components of the biogas equipment will include biogas cleaning/compression, storage, piping, injection and underground gas pipeline.

FEEDBACK AND INPUT PROVIDED

Although EPCOR planned on holding facilitated table discussions for long-term planning, safety & hygiene, odour action plan and renewable natural gas the constantly changing number of participants at the open house made coordinating discussions at a particular time difficult to manage. EPCOR made the decision to individually engage with participants as opposed to hosting facilitated table discussions with multiple participants.

GRAFFITI BOARDS

Participants provided the following feedback and input on the graffiti boards placed throughout the room.



The following has been transcribed from the image above:

Communications

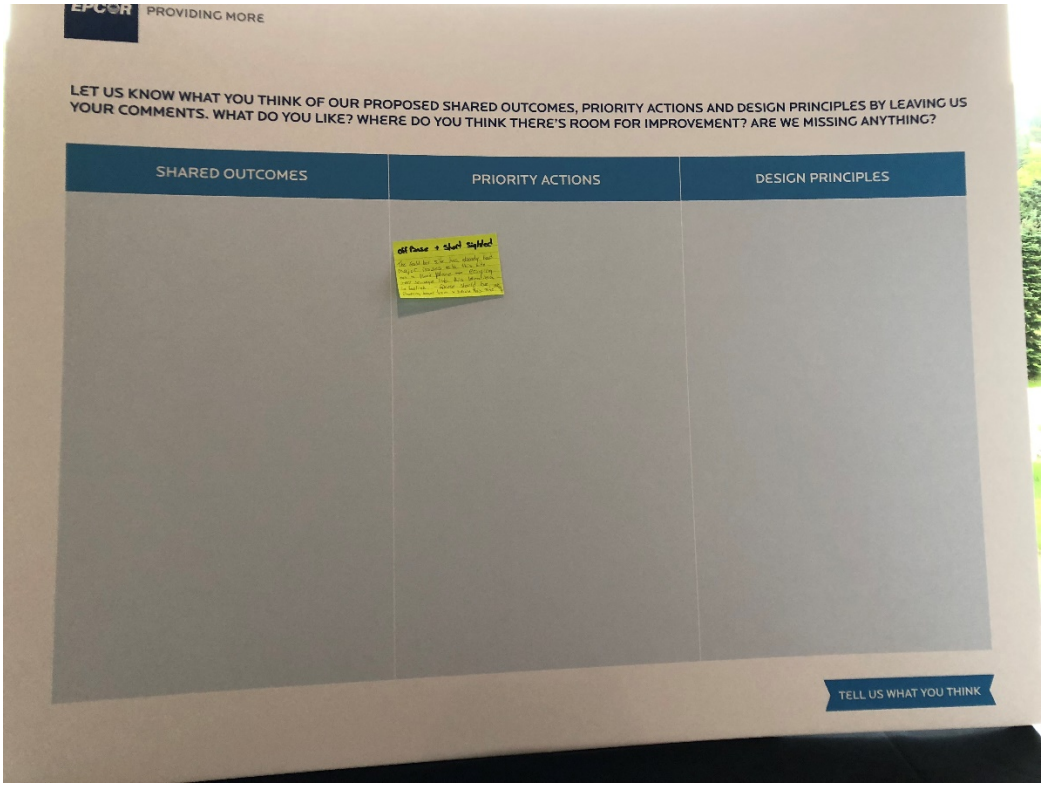
- More information on SESS and regional wastewater planning should be shared and presented. Either by EOCOR or City. This should happen soon.
- How would residents of Gold Bar be informed in the case of an emergency situation where an evacuation would be a necessity? We have limited egress already. If 50th street is narrowed for a period of time, this should be a consideration.
- Need better direct communication with community members. Today's open house is excellent and we know about it through your mailout. Thank you. We didn't know anything about previous focus groups. How was the community notified of the opportunity to participate in those? We are not all on Facebook.
- The public engagement workshops and the open house is an excellent way to engage the Public and provide us with key information and voice in your future development.
- Initial communications from EPCOR re: plant upgrades were deemed deceitful. Stakeholders were kept in dark about SESS line changes from the LT Capital Region. EPCOR needs to be honest.

Advise

- Directing the SESS to the Capital Regional Plant is a better idea than expanding at Gold Bar due to increased industrial impact on the parks, boat launch, and residential neighbourhoods.
- Seems illogical to triple sanitary flow to Gold Bar (close proximity) to existing houses. Why not take new capacity to Capital Region as per original design.
- When Gold Bar was originally developed (the subdivision). Gold Bar was considered to be in the "Blast Zone". Original residents will tell you this. Is it wise to increase the size of the plant?
- Solar – yes! Not in the river valley.
- EPCOR is about profit…. That is why they want flows from SESS line. Shame on you! Preserve river valley.
- Actions speak louder than words!
- The Capital Region Sewage Plant was the long-term plan. Gold Bar is to shutdown, a sewer terminal or pipe to transport sewage to the Capital Regional Plant. Stick to the plan.
- Stick to the long term plan!

Decide

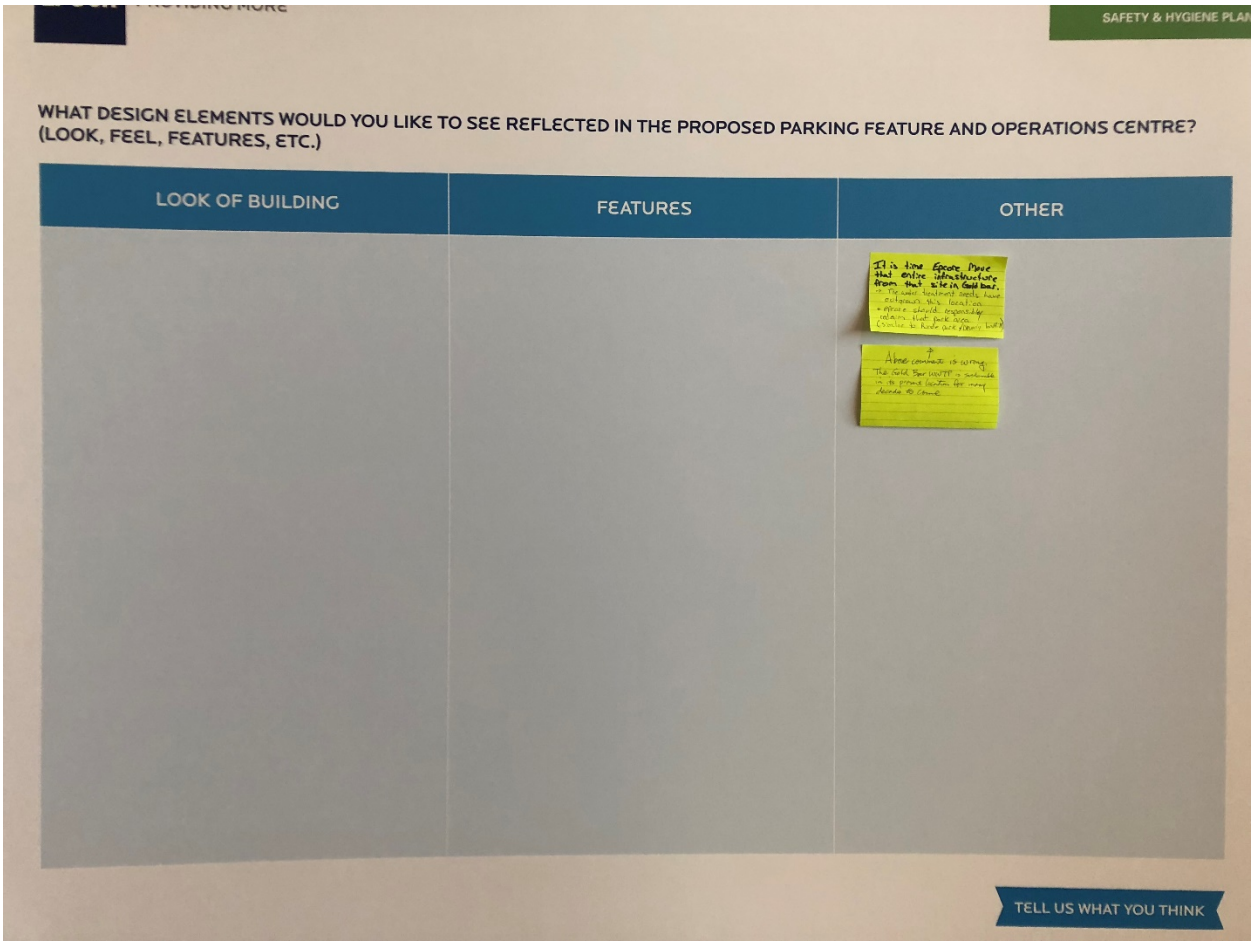
- Very glad that the parking lot is not proceeding. Loss of parks is not acceptable.



The following has been transcribed from the image above:

Priority Actions

- Off base and short sighted. The Gold Bar site has already had major issues with this site on a flood plain. Bringing more sewage into this location is foolish. EPCOR should be planning for the longer term and move this site elsewhere.



The following has been transcribed from the image above:

Other

- It is time EPCOR move that entire infrastructure from that site in Gold Bar. The water treatment needs have outgrown this location and EPCOR should responsibly reclaim that park area (similar to Rundle Park/Beverly landfill).
- The above comment is wrong. The Gold Bar WWTP is sustainable in its present location for many decades to come.

FEEDBACK AND INPUT PROVIDED

Participants provided the following feedback and input to EPCOR staff. These comments were either documented on flip chart paper or filled out on comment forms.

<u>Long-Term Planning</u>

- Great job on odour reductions to date
- Improvement suggestions:
    - Visual and noise impacts

    - Feels like a constant construction zone
    - Plant large and deciduous trees to help with visual and noise
    - Stay in existing foot print – horizontal and vertical
- EPCOR is being a good neighbour by keeping us informed
- Improvement – move towards composting toilets and support this in the community. There are better uses for our drinking water than as black water.
- Residents of this region really should not be flushing toilets with potable (drinking) water. Rainwater yes. Urinals yes.
- Need more research and guidelines into H20 harvesting from the rain. Even Africa has us beat! They use rain water there and we are behind.
- Reduce resilience on facilities near residential neighbourhoods – increate transfer to south trunk line facility to Fort Sask future facility
- Not happy with trunk line
- What happens after 2060?
- At very minimum, we should not be using treated H20 for irrigating our lawns. This is the job of rainwater. Too much water waste in our society.
- Where is there discussion of water conservation and public education on this? I don't hear EPCOR speak often of water conservation at all, even while my neighbours water their lawns at noon on sunny days.
- Where is there discussion of grey and black water re-use?
- Messaging is consistent – good job!
- Positive experience
- Reports, especially SESS, should be made public
- City should consider redundancy in the number of plants
    - Floods and issue could cause an emergency by relying on a single WWTP
- Likes that EPCOR is consulting with the public and will honor the input

Safety & Hygiene

- Clean and safe air to breathe
- Creating separation between industrial activities and residential zoning
- Creating separation between industrial sewage treatment and a major city park
- All opportunities to move industry out of Gold Bar Park
- Put a sidewalk and curb next to the bioreactors (north side)
- Happy we are staying within our fenceline. Questioned why we weren't originally going within
- Where are the buildings planned to go?
- Why the expansion?
- Consider adding solar panels to new and existing buildings – seek partnerships with schools for mutual benefits
- Mitigate impact to Gold Bar Park road
- Improve safety of east gate crossing with shared use path
- Consider priority parking for carpooling
- Improve drainage of Gold Bar Park road
- Improve safety of mountain bike trail and road crossing

Odour

- What is the overall goal to reduce odour?
- Who participated in the workshops?
- What are we doing to achieve these goals?
    - Completed projects
    - Action plan review
- Neighbourhood residents take surveys of neighbourhood to check if people are noticing odours. Is this something EPCOR does? It is more beneficial to have someone having conversation with customers about odour – builds relationships
- Once this is all done, will it be odour free?
- Where is the existing monitoring stations?
- Are there public tours?
- Unsure on location of monitoring stations
- The smell on the south side of the plant on the bike trails is horrible
- Improve communication about odour:
    - Display odour readings with weather
    - Have an online tool customers can use to see current readings
    - Article in South East Voice for information (community newspapers)
    - Gold Bar WWT have their own Instagram accounts for alarms, event, and information and use this portal as a way of informing people i.e. What is that smell? And then have a slide providing info on that. Use Instagram to show more of what we do as it is valuable informative content
    - Create a hashtag to track activity
    - Need to hear more about initiatives to gain support
- There have been significant improvements to odour
- Focus on river quality
- Feedback regarding the proposed location of Air Monitoring Station:
    - Should be located somewhere where it could be hidden
    - Parks yard is preferred location for monitoring station
    - Approximately four participants indicated they were indifferent to the location of the monitoring station

Renewable Natural Gas

- Length of construction?
- Concerns about noise vs. odour
- Length and height of pipe racks
- Do you really need to expand? – generally positive
- Suggest moving R&D to Cloverbar
- Cost of RNG?
- People reassured re: fenceline
- Add more trees
- The plant has been under construction forever, why?

- When are the cranes going to go?
- Expiration date on the plant?

Other

- Our continued partnership with EPCOR for the facilitation of Gold Bar Wastewater tours and river access in the Capilano park area. Being able to educate students of the purpose of Gold Bar and their participation of responsible water management is very important to our program and the environment.
- Found this open house to be more information than in Feb 2018
- Some people were jolted by our responses at the first open house

HANDOUTS

EPCOR had the following handouts available at the open house:

- Design Principles.
- Shared Outcomes, Priority Actions and Design Principles.
- Long-Term Planning.
- Safety & Hygiene.
- Odour Action Plan.
- Renewable Natural Gas.

Participants had the option of taking copies of the handouts listed above. Copies of the handouts can be found in Appendix C.

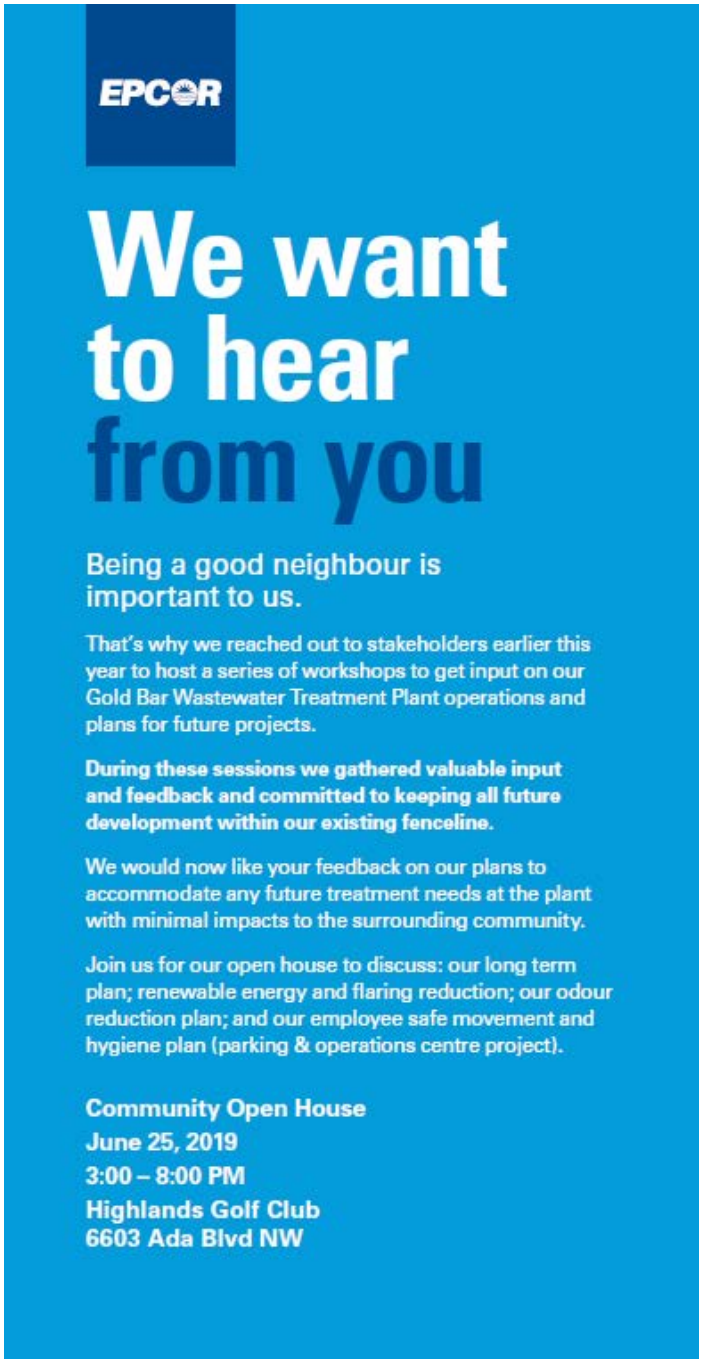
FEEDBACK FORMS

EPCOR distributed feedback forms to those that participated in the open house. The results from the feedback forms can be found in Appendix D.

APPENDIX A

INVITATION

Postcard



Collaborating on shared outcomes

We're better together.

During our stakeholder workshops we collaborated on a number of exercises including creating a list of common goals we call "shared outcomes". These shared outcomes will help guide our projects and planning initiatives. They include:

Quality of Life
The Gold Bar Wastewater Treatment Plant is operated, maintained and updated in a way that reduces impacts and improves quality of life, including odour, noise and enjoyment of parks.

Safety
Community, public and worker safety are protected.

Relationship
An honest, transparent trusting relationship is developed between us and you.

Environment
Pollution is prevented and our impacts on air, land, water climate and ecosystems are reduced.

Reliable, Responsible and Sustainable
The Gold Bar WWTP is designed, maintained and operated in a prudent and responsible manner.

EPCOR

To learn more about our workshops, a preview of the content we'll be covering at the Open House, and general operational updates please visit **epcor.com/goldbar**

Email Invitation

APPENDIX B

OPEN HOUSE PANELS

EPCOR PROVIDING MORE

WE WILL

We will work directly with you throughout the process to ensure your feedback is understood and considered. We will ensure that your feedback is directly reflected in the alternatives developed and share how public input influenced the decision.

PROVIDING MORE

OPTIONS FOR ENGAGEMENT TODAY

PARTICIPANTS WILL HAVE THE FOLLOWING ENGAGEMENT OPTIONS AT THE GBWWTP OPEN HOUSE

- Passive Engagement – Participants can look at panels and leave comments on Graffiti Boards
- One-on-One Engagement –Participants have the option of sharing their feedback directly with an EPCOR representative
- Facilitated Discussion – Participants can join a facilitated table discussion to provide input (discussion anticipated to take approximately 15 minutes)
    - Please sign up for a discussion at the welcome table (with new rounds starting every 30 minutes)

PROVIDING MORE

PRIOR TO TODAY'S OPEN HOUSE - WORKSHOPS WITH REPRESENTATIVES FROM THE COMMUNITY AND STAKEHOLDER GROUPS

EPCOR works hard to be a good neighbour in the communities where we operate. That's why earlier this year, we reached out to the community and stakeholders around the Gold Bar Wastewater Treatment Plant (GBWWTP) to understand how we could better operate our facility and plan for future projects while still meeting the needs of the broader Edmonton population and Gold Bar's ongoing operations.

We organized a subcommittee of citizens called the Citizen Planning Committee (CPC) to take part in three community workshop sessions focused on engaging with participants on operations at the GBWWTP.

Workshop 1 (February):	**Workshop 2: (March)**	**Plant Tours (April/May):**	**Workshop 3 (May):**
· Understand community values, issues, priorities · How they want to engage · Information needs · Overview of Operations	· Refined and ranked Shared Outcomes as a guide for activity at plant · Refined Community Engagement Framework to guide engagement for plant	· End to end facility tour · IRP context provided at stations during the tour	· Reviewed Design Principles to be included in the IRP · Four applied exercises: discussed options for projects and planning, applied the design principles as criteria for refining and selecting the preferred option

PROVIDING MORE

HOW WE PLAN FOR THE LONG TERM

ON AVERAGE, MORE THAN $50 MILLION IN CAPITAL PROJECTS ARE UNDERTAKEN DURING EACH PERFORMANCE BASED REGULATION (PBR) PERIOD AT GOLD BAR WWTP FOR MAINTENANCE AND REHABILITATION. FOR THE 2017 – 2021 PERIOD, CITY COUNCIL APPROVED $235 MILLION IN FUNDING FOR CAPITAL PROJECTS AT GOLD BAR.

Integrated Resource Plan (IRP)

- Long term planning process (continuously updated)
- Considers traditional factors of forecasted demand and treatment capacity
- Considers external factors such as changing regulatory requirements, climate change, corporate goals, community values, and new technologies, etc.
- Addresses reliability and rehabilitation of existing assets
- Aligns current and future work to support achievement of 5 shared outcomes (quality of life; safety; relationship; environment; reliable, responsible, sustainable).

PROVIDING MORE

WORKSHOP OUTCOMES

OUR SHARED GOALS = SHARED OUTCOMES

WITH THE CITIZEN PLANNING COMMITTEE (CPC) WE ESTABLISHED THE FOLLOWING GOALS EPCOR AND THE COMMUNITY CAN COMMIT TO:

QUALITY OF LIFE

The Gold Bar WWTP is operated, maintained and updated in a way that reduces impacts to stakeholders and improves quality of life, including odour, noise and enjoyment of parks and recreation.

SAFETY

Community, public and worker safety and health are protected.

RELATIONSHIP

An honest, transparent, trusting and respectful long-term relationship is developed between EPCOR and Gold Bar WWTP stakeholders.

ENVIRONMENT

Pollution is prevented. The impact of the Gold Bar WWTP on air, land, water, climate and ecosystems is reduced.

RELIABLE, RESPONSIBLE AND SUSTAINABLE

The Gold Bar WWTP is designed, maintained and operated in a prudent and responsible manner.

TELL US WHAT YOU THINK

DESIGN PRINCIPLES : HOW WE WILL ACHIEVE OUR SHARED OUTCOMES TOGETHER

The Design Principles define how EPCOR will achieve the goals described in the five Shared Outcome Statements and provide a framework to guide the evolution of the site. They will be incorporated into the IRP.

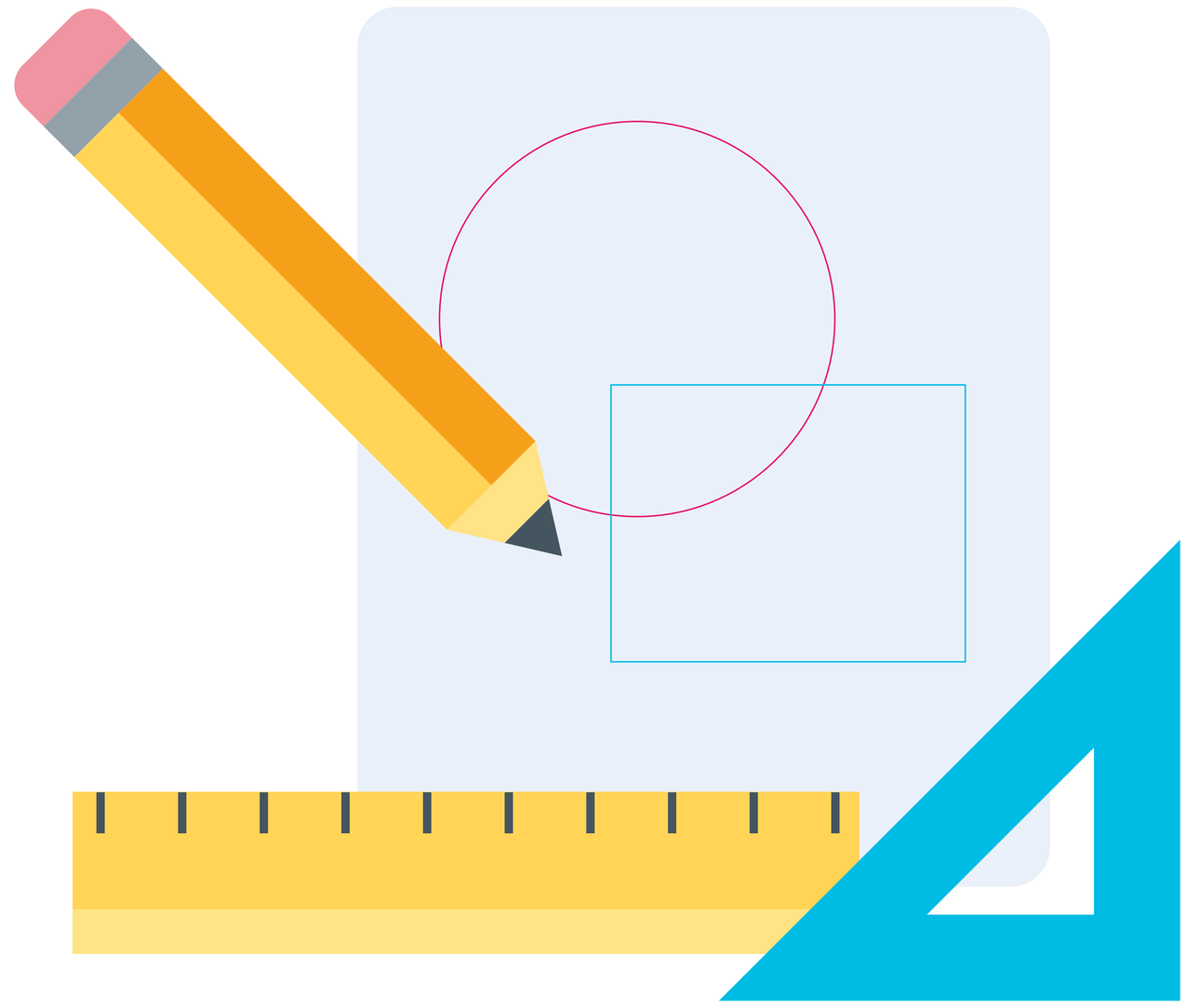
	QUALITY OF LIFE	SAFETY	RELATIONSHIP	ENVIRONMENT	RELIABLE, RESPONSIBLE, SUSTAINABLE
Shared Outcomes					
Design Principles	Accelerate odour reduction	Continuously improve safety	Communicate openly	Continuously improve environmental performance	Continuously maintain reliable operations
	Remain within the existing fenceline	Ensure safe movement on-site	Align operating protocols	Reduce environmental impacts	Plan for a range of scenarios
	Prevent increases to odour and noise	Improve worker hygiene and safety	Engage regularly	Increase resiliency	Prudently manage impacts to ratepayers
	Restore disturbed vegetation	Protect public safety from site-related traffic	Share options and optimize designs	Engage employees and stakeholders	
	Mitigate temporary impacts				

TELL US WHAT YOU THINK

DESIGN PRINCIPLES

The IRP and its projects are implemented by many teams working over multiple decades. In planning for the future, and in implementing individual projects, EPCOR has identified twenty Design Principles that will guide the ongoing work of staff and contractors. These Design Principles define how EPCOR will achieve the goals and priority actions described in the five Outcome Statements, and provide a framework to guide the evolution of the site. The objective of planners and project managers will be to deliver all process and non-process work at the site within these Design Principles, and to engage with stakeholders and regulators to explore options and trade-offs.

EPCOR seeks to implement high quality public engagement programs that result in critical infrastructure being permitted, built, and operated in a way that is aligned with the interests and priorities of the community and meets the needs of the broader society. The Design Principles document EPCOR's commitments to stakeholders, clarify expectations for EPCOR's teams now and in the future, and provide stakeholders and EPCOR with criteria against which individual projects and design decisions can be tested.



SHARED OUTCOME AND DESIGN PRINCIPLES: QUALITY OF LIFE

QUALITY OF LIFE

Gold Bar WWTP is operated, maintained and updated, in a way that reduces impacts to stakeholders and improves quality of life, including odour, noise and enjoyment of parks and recreation today and into the future.

Design Principles

In its long-term plans, individual projects, and ongoing operations at Gold Bar WWTP, EPCOR will:

1. Accelerate odour reduction. Identify and accelerate capital and operating initiatives that reduce odour from existing operations, and meet current and future odour performance standards.
2. Remain within the existing fenceline. Design Gold Bar WWTP to eliminate, offset, mitigate or reduce impacts to adjacent parkland (in that order of preference).

   The design of all process and non-process facilities at Gold Bar WWTP will be undertaken with the objective of keeping the facility within its existing fenceline.
3. Prevent increases to odour and noise. Design the facility to be able to handle future volume changes without increases in odour or noise.
4. Restore disturbed vegetation. Develop and implement a policy to re-naturalize or replace trees and vegetation that are disrupted by utility work.
5. Mitigate temporary impacts. Minimize or mitigate temporary impacts from construction and maintenance activities, including any temporary impacts that occur from work outside the fenceline.

SHARED OUTCOME AND DESIGN PRINCIPLES: SAFETY

SAFETY

Community, public and worker safety and health are protected.

Design Principles

In its long-term plans, individual projects, and ongoing operations at the Gold Bar WWTP, EPCOR will:

6. Continuously improve safety. Assess current safety performance, evolving standards and emerging risks, and propose initiatives that maintain regulatory compliance, improve safety, and provide information to the community.

7. Ensure safe movement on-site. Develop a plan for on-site vehicle, people movement, and parking, that improves worker and visitor safety.

8. Improve worker hygiene and safety. Develop a plan for the location of non-process buildings and hygiene facilities that improves worker safety and limits health risks

The design of all process and non-process facilities at Gold Bar WWTP will be undertaken with the objective of keeping the facility within its existing fenceline. EPCOR will minimize or mitigate temporary impacts from construction.

9. Protect public safety from site-related traffic. Consider the individual and cumulative transportation impacts from construction and maintenance activities, and develop plans to protect public safety on Gold Bar Park Road and 50th Street

PROVIDING MORE

WORKSHOP OUTCOMES

SHARED OUTCOME AND DESIGN PRINCIPLES: RELATIONSHIP

RELATIONSHIP

An honest, transparent, trusting and respectful long-term relationship is developed between EPCOR and Gold Bar WWTP stakeholders.

Design Principles

In its long-term plans, individual projects, and ongoing operations at the Gold Bar WWTP, EPCOR will:

10. Communicate openly. Make timely, open, complete and transparent communication about planning and development at Gold Bar WWTP.
11. Align operating protocols. Update internal operating procedures at Gold Bar WWTP to implement the communication protocols agreed to with the community.
12. Engage regularly. Periodically engage with stakeholders to review and refresh the communication protocols and products used to share operations and project information with stakeholders (including employees), and the channels that stakeholders use to provide information to Gold Bar WWTP.
13. Share options and optimize designs. Share design criteria and options for significant projects, and for projects that could impact quality of life for stakeholders, and use stakeholder input to improve and finalize project design and option selection.

PROVIDING MORE

WORKSHOP OUTCOMES

SHARED OUTCOME AND DESIGN PRINCIPLES: RELIABLE, RESPONSIBLE AND SUSTAINABLE

RELIABLE, RESPONSIBLE AND SUSTAINABLE

The Gold Bar WWTP is designed, maintained and operated in a prudent and responsible manner.

Design Principles

In its long-term plans, individual projects, and ongoing operations at the Gold Bar WWTP, EPCOR will:

14. Continuously improve environmental performance. Assess current environmental performance, evolving standards and emerging risks, and propose initiatives that maintain regulatory compliance and improve environmental performance
15. Reduce environmental impacts. Prioritize investments and operating practice changes that reduce the Gold Bar WWTP's environmental impact, with a focus on contributing to the reduction of global greenhouse gas emissions, the protection of water quality, the protection of parkland, and the recovery of resources.
16. Increase resiliency. Protect the community from the impacts of extreme weather and climate change by implementing measures to make the Gold Bar WWTP more resilient against overland and river flooding.
17. Engage employees and stakeholders. Involve and encourage the participation of employees and stakeholders in the improvement of our health, safety and environmental performance.

PROVIDING MORE

WORKSHOP OUTCOMES

SHARED OUTCOME AND DESIGN PRINCIPLES: ENVIRONMENT

ENVIRONMENT

Pollution is prevented. The impact of the Gold Bar WWTP on air, land, water, climate and ecosystems is reduced.

Design Principles

In its long-term plans, individual projects, and ongoing operations at Gold Bar WWTP, EPCOR will:

18. Continuously maintain reliable operations. Incorporate condition assessments of current facilities, and identify the work required to rehabilitate or maintain infrastructure.
19. Plan for a range of scenarios. Conduct scenario planning to identify the range of work that would be required to serve future populations under changing regulatory and climate conditions.
20. Prudently manage impacts to ratepayers. Develop options that result in reasonable costs for ratepayers, and which spread the rate impacts of investment over time.

EPCOR PROVIDING MORE

LET US KNOW WHAT YOU THINK OF OUR PROPOSED SHARED OUTCOMES, PRIORITY ACTIONS AND DESIGN PRINCIPLES BY LEAVING US YOUR COMMENTS. WHAT DO YOU LIKE? WHERE DO YOU THINK THERE'S ROOM FOR IMPROVEMENT? ARE WE MISSING ANYTHING?

SHARED OUTCOMES	PRIORITY ACTIONS	DESIGN PRINCIPLES

TELL US WHAT YOU THINK

PROVIDING MORE

WORKSHOP OUTCOMES

PUBLIC ENGAGEMENT FRAMEWORK: HOW EPCOR WILL INTERACT WITH THE COMMUNITY ON PROJECTS AND OPERATIONS AT GBWWTP

Though collaboration, EPCOR and the CPC created the following spectrum to guide public engagement for operations and planned work at Gold Bar Wastewater Treatment Plant.

	Communication will be an important component for all levels of engagement				
		Public Engagement			
	Communications (Inform, listen and Learn)—will be an important component for all levels of Engagement	**Advise (Share info)**	**Refine (Work together and build a plan)**	**Create (Work side by side and build a shared plan)**	**Decide (You decide)**
EPCOR's Commitment	- We will keep you informed - We will respond in a timely manner and resolve issues - We will ensure the safety of residents through the dissemination of information about possible danger and emergency response procedures - We will inform the community about activities at the site that have impacts on traffic, noise, etc.	We will listen to and acknowledge concerns and aspirations and share how public input (if received) influenced the decision.	We will work **directly with you throughout the process** to ensure your feedback is understood and considered. We will ensure that your feedback is **directly reflected in the alternatives** developed and share how the public input influenced the decision.	We will partner with you in each aspect of the decision including the d**evelopment of alternatives and identification of the preferred solution**. We will look to you for **advice and information in formulating solution and incorporate** your advice into the decisions to the **maximum extent possible.**	We will place f**inal decision making** in your hands. We will implement what you decide.
Why	To provide you with information to assist you in understanding the problem, alternatives, opportunities and/or solutions. This will also be a mutually satisfactory process for identifying, investigating and responding to complaints and concerns regarding operations.	To assist you in understanding what we do and why we are doing it. Flag any concerns prior and consider them in the plan.	To obtain your input on problems, alternatives, opportunities and/or solutions.	To obtain your input on every aspect of the work and involve you in complex discussions that may impact your community.	To have you lead on community initiatives.
When	Before and at the beginning of ongoing operations, projects, long-range planning, and operational issues (e.g. odour reporting on website, increased traffic, unplanned maintenance issue leading to odours).	During ongoing operations, and for small, low-impact projects (e.g. crane on site, planned maintenance work leading to odours).	For medium-impact projects, long-range planning and one-off operational issues (e.g. odour monitoring - location of equipment, planned work outside fenceline leading to trail closure in summer for 2 weeks).	For major stakeholder impacts related to multiple shared outcomes. An example may be perimeter signage (e.g. review perimeter signage - safety and interpretive in nature).	For community based projects (e.g. New MT bike trail through GB land).
How (Suggested Techniques)	- Newsletters - Social Media - Interviews - Websites - Community Newspapers - Signs in Gold Bar Park - Facility Tour - Through partners (e.g. community leagues)	- Survey - Newsletters - Social Media - Interviews - Websites - Focus Groups - Open House - Signs in gold bar park - Community Liasion Committee (CLC) - Community Newspaper	- Survey - Interviews - Focus Groups - Online Engagement - Open House - Workshop - Pop-up engagement in Gold Bar Park - Community Liasion Committee (CLC)	- Workshop - Drop-in Engagement - Community Liasion Committee (CLC)	- Workshop - Drop-in Engagement - Community Liasion Committee (CLC)

TELL US WHAT YOU THINK

EPCOR PROVIDING MORE

LET US KNOW WHAT YOU THINK OF OUR PROPOSED PUBLIC ENGAGEMENT FRAMEWORK BY LEAVING US YOUR COMMENTS. WHAT DO YOU LIKE? WHERE DO YOU THINK THERE'S ROOM FOR IMPROVEMENT?

COMMUNICATIONS	ADVISE	REFINE	CREATE	DECIDE

TELL US WHAT YOU THINK

PROVIDING MORE

INTERESTED IN ADVISING EPCOR ON A COMMITTEE GOING FORWARD? EPCOR'S COMMUNITY LIAISON COMMITTEE (CLC)

- EPCOR has operated a Community Liaison Committee (CLC) specific to the ongoing operations of the GBWWTP for over ten years.
- EPCOR is currently recruiting for the 2019-2020 Community Liaison Committee (CLC) term.
- The CLC provides an opportunity for members to learn and provide feedback regarding EPCOR's provision of reliable and high-quality water and wastewater services. The CLC is a very important link to the communities surrounding the GBWWTP.
- The CLC is comprised of 10-15 volunteers and meets several times a year. We ask members to sit on the committee for two years.
- The community leagues and heavy-use recreational groups located near the GBWWTP have already put forward representatives to participate in the CLC.
- We still have two spots available on the CLC, please let an EPCOR representative at the open house know if you are interested in joining.
- The new CLC term (2019-2021) will have their first kick-off meeting in September 2019.

EPCOR

PROVIDING MORE

SIGN UP FOR A DISCUSSION ON THIS TOPIC

DISCUSSING LONG-TERM PLANNING SCENARIOS

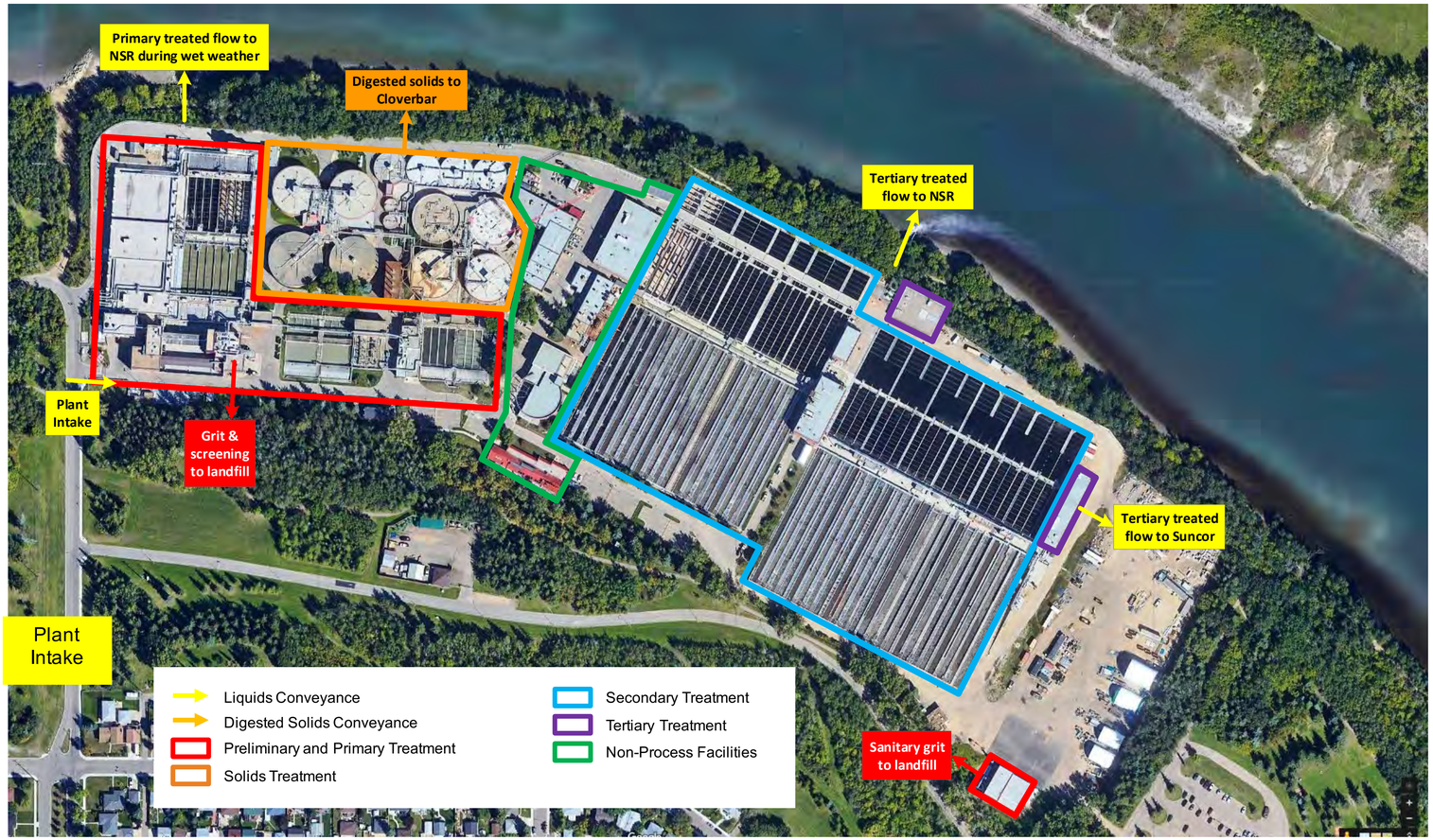
HOW DO YOU DESIGN, MAINTAIN AND OPERATE THE PLANT IN A PRUDENT MANNER?

DEFINE THE GOAL

The Gold Bar WWTP is designed, maintained and operated in a prudent and responsible manner.

1. Gold Bar WWTP will meet or exceed regulated performance requirements, now and in the future.
2. Gold Bar WWTP will be maintained in good working order, and demonstrate sustainable and reliable operation.
3. Capital and operating costs will be prudent, giving consideration to the impact on ratepayers.
4. Gold Bar WWTP will be designed and operated in a way that mitigates its impact on the community.

PLANT OVERVIEW – KEY COMPONENTS



- **For the 2017 – 2021 period, City Council approved $235 million in funding for capital projects at the Gold Bar WWTP.**
  - About $50 million in capital projects are undertaken during each PBR period for maintenance and rehabilitation.
  - This level of capital expenditure is expected to continue for the foreseeable future.
- **Most investment at Gold Bar is reliability driven – maintaining / replacing assets to ensure safe and reliable operation of the plant.**
  - As assets are rehabilitated or replaced as they approach end of life, there is often positive impact on the ability of the plant to treat wastewater. This reduces the need to expand the footprint of the plant.

KEY VARIABLES FOR PLANNING

Drivers

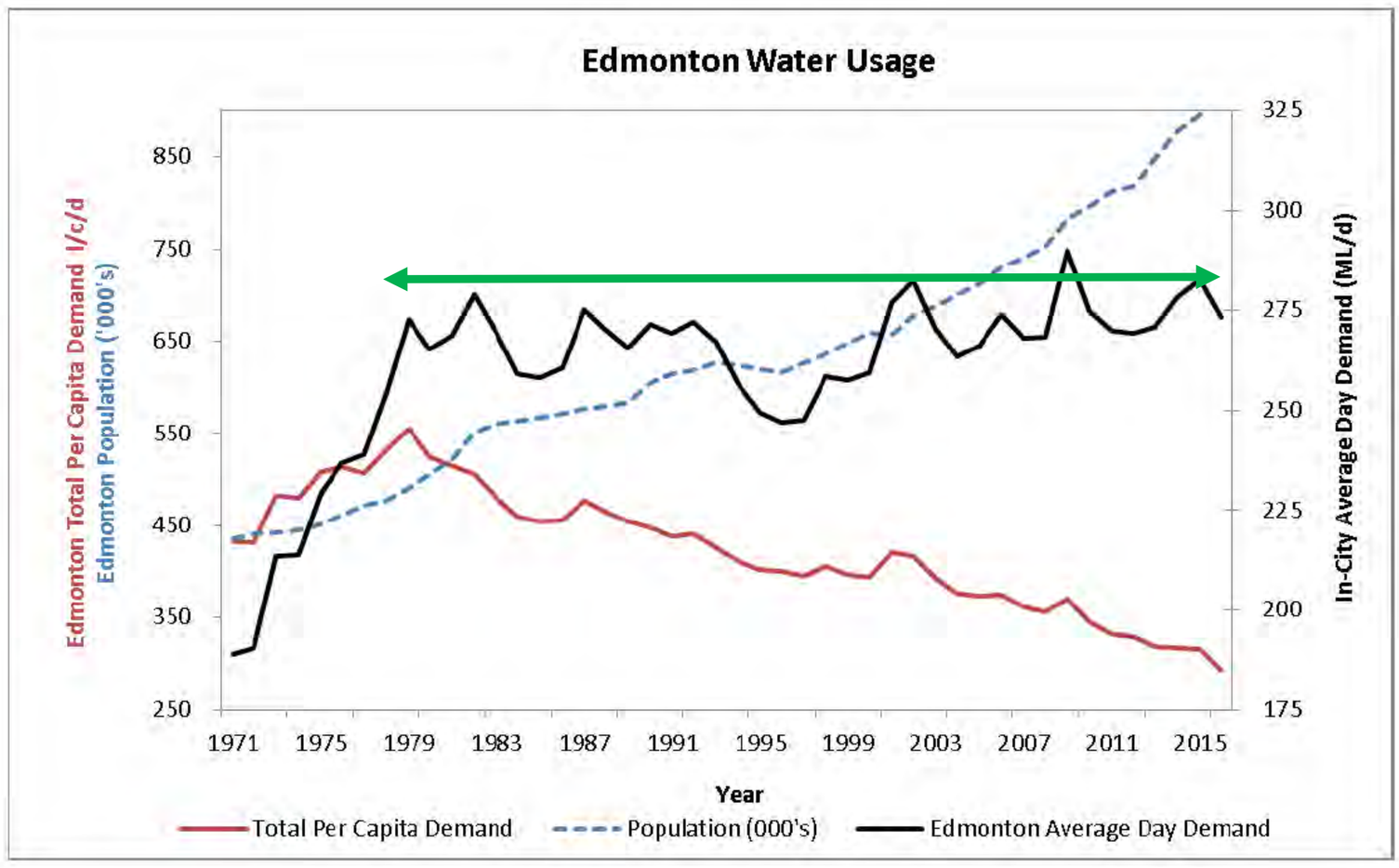
- **Population Growth:** The rate of growth is the primary driver of volume changes
- **Water Conservation:** Declining per person water consumption

Impacts

- **Loadings (solids, organics, nutrients)** coming to the plant grow in proportion to population
- **Liquid flows** to the plant are not growing as fast as overall population growth due to the offsetting effects of water conservation
- As a result, the wastewater coming to the plant is expected to **increase in strength** (be more concentrated) over time

GROWTH AND WATER CONSERVATION

Total water usage in Edmonton has been essentially flat over the last 40 years as the impact of population growth has been offset by a systematic decline in per capita water consumption.



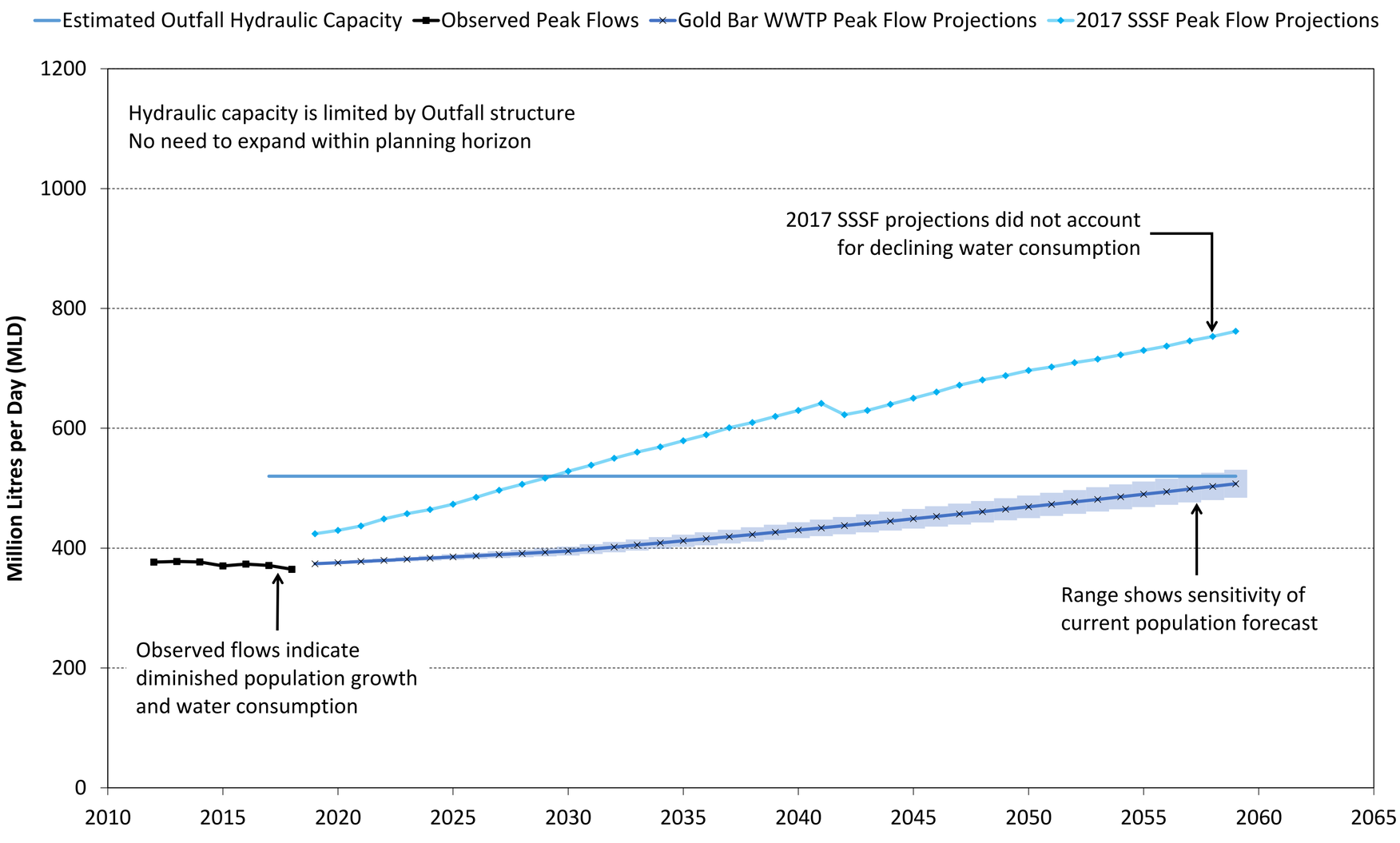
OTHER PLANNING VARIABLES AND UNCERTAINTIES

- **Growth**
  - Higher or lower than expected growth from residential and industrial clients will shift the date at which secondary treatment technology needs to be changed (as early as 2027 or later).
- **Loading**
  - Disruptive trends in human consumption and waste generation will impact the planning process and timeline for future improvements.
  - For example, it is uncertain when the water conservation measures will normalize allowing flows to increase proportionately with growth again.
- **Regulatory Evolution**
  - Environmental regulations have become progressively rigorous with awareness and are expected to continue. This will significantly influence the timeline of required improvements.
- **Climate Change**
  - Changes in weather and rainfall pattern have significant impacts on wastewater treatment strategy, primarily because of the combined sewer system in Edmonton.
- **New Technologies**
  - Application of new technologies will allow us to improve performance while maintaining or reducing physical footprint, recover energy and resources from wastewater (Biogas, Biosolids, Nutrients, Treated water, etc.) and improve environmental sustainability.

FLOW : LIQUID CONVEYANCE CAPACITY

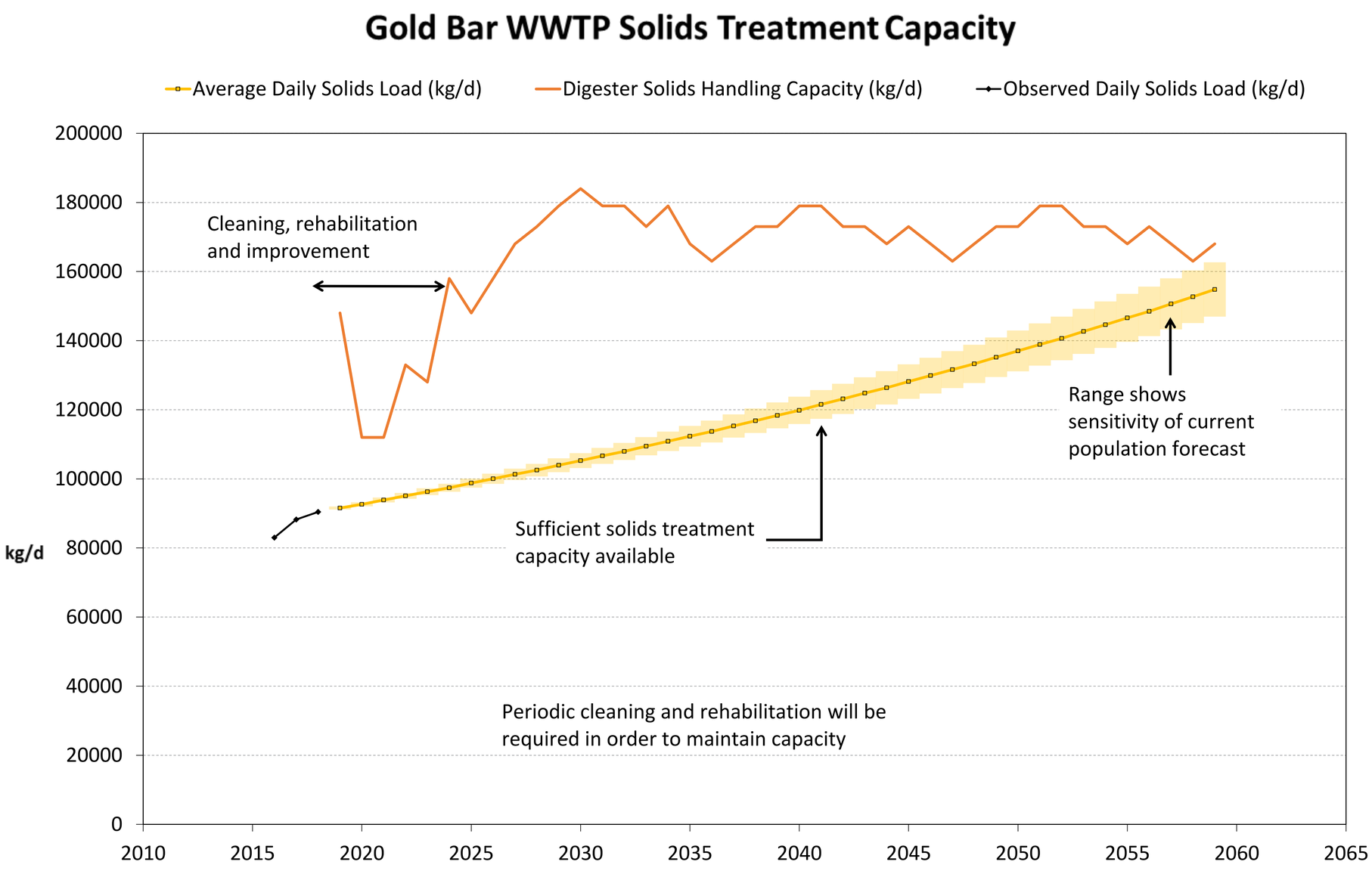
Actual liquid flows to Gold Bar (solid black line) have been flat due to water conservation measures. EPCOR expects growth in future Liquid Flows to be modest – far less than the 2017 ISL estimates used by the SSSF.

Conclusion: Gold Bar WWTP has adequate hydraulic capacity to handle flows through 2060 and possibly longer within the plant's footprint.



FLOW: SOLIDS TREATMENT CAPACITY

Conclusion: Gold Bar WWTP has spare solids treatment capacity through 2060 and longer.

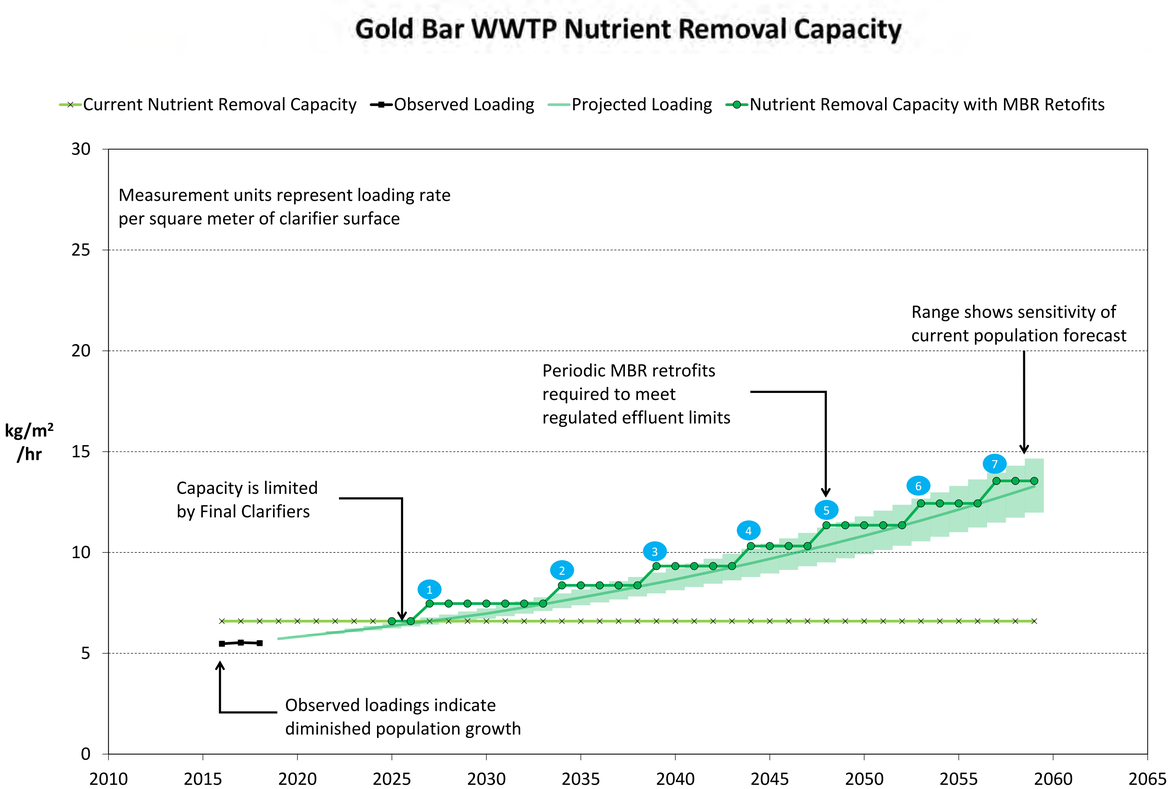


FLOW: NUTRIENT REMOVAL CAPACITY

Conclusion: Wastewater strength is expected to increase over time.

Gold Bar WWTP will **have to increase its nutrient removal capacity** to keep pace. This is accomplished by retrofitting existing secondary clarifier tanks with membrane technology. These retrofits will be required at a slower pace if South Edmonton Sanitary Sewer (SESS) flows are redistributed between Gold Bar WWTP and ACRWC.

Starting in 2027 EPCOR will start retrofitting existing secondary clarifier tanks with membrane technology



THERE ARE 3 COMPONENTS OF WASTEWATER FLOW TREATMENT

LIQUIDS

We have capacity to treat flows well into the future (2060 or longer).

SOLIDS

We have capacity to treat flows well into the future (2060 or longer).

NUTRIENTS

We can increase our capacity over time by retrofitting existing tanks with membrane technology. These retrofits will be required at a slower pace if South Edmonton Sanitary Sewer (SESS) line is diverted to the Alberta Capital Region Wastewater Commission Treatment Plant.

Membrane technology that would be inserted into existing tanks

PLANNING CONCLUSIONS

Gold Bar WWTP is able to safely treat all flows that come to it through 2060 while remaining within its existing footprint and fenceline

1. Gold Bar WWTP has **ample hydraulic capacity** meaning that it is currently sized to handle liquid flows through 2060. Growth in sanitary flows is expected to be flat due to the impact of water conservation.
2. Gold Bar WWTP also has **spare solids treatment capacity** in the digesters on site to treat solids growth through 2060. Solids loading to the plant is expected to increase in proportion to population growth.
3. As the amount of municipal waste grows with population and flows are moderated due to water conservation, wastewater strength is expected to increase over time. Gold Bar WWTP will **have to increase its nutrient removal capacity** to keep pace. This is accomplished by retrofitting existing secondary clarifier tanks with membrane technology. Current projections indicate that the earliest this would be needed is 2027. These retrofits will be required at a slower pace if future growth in sanitary flows from the SESS system is redirected to Alberta Capital Region Wastewater Commission.

DO MORE FLOWS MEAN MORE IMPACT?

NO

- We have a long term plan in place to stay within the existing fenceline for the duration of the planning horizon (2060)
- Implementation of new technologies will allow us to mitigate any indirect impacts
- Throughout the past six decades the Gold Bar WWTP has been updated and improved significantly in order to provide service to the growing population of the City, while lowering its impact on the environment and the community by means of using new technology. EPCOR commits to continue doing this and minimize the operational impact of Gold Bar WWTP regardless of the volume of flows received for treatment.

IS THE SESS LINE GOING TO IMPACT OUR NEIGHBORHOOD?

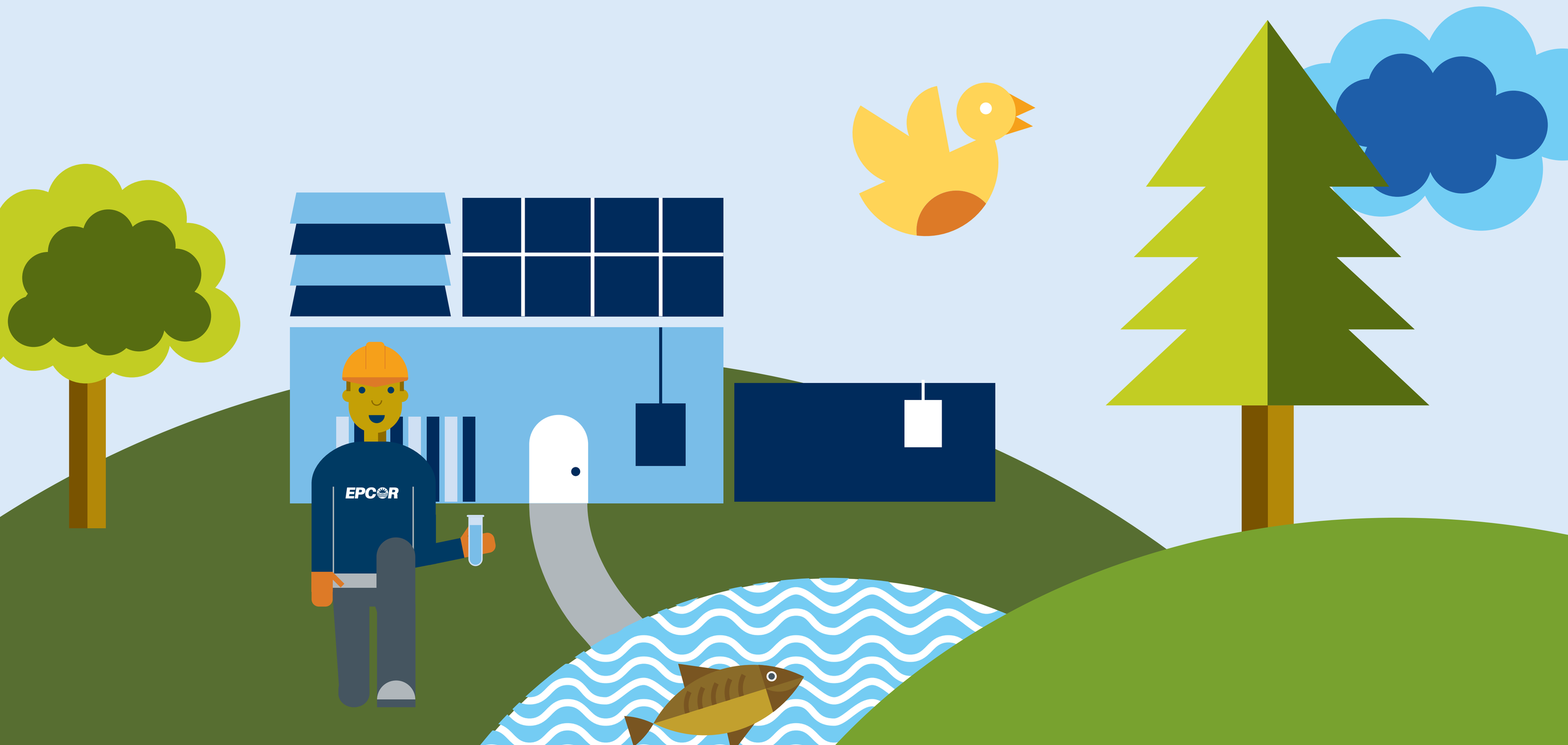
- The South Edmonton Sanitary Sewer (SESS) is not a single trunk line, it is a system of sewers that services southern areas of the City.
- Construction of the SESS system has been ongoing for more than a decade and is necessary to service associated areas.
- Sanitary flows from the City areas serviced by the SESS system are currently conveyed to Gold Bar Wastewater Treatment Plant through the existing collection system infrastructure. This has not increased the external impact of Gold Bar WWTP.
- A decision on the ultimate distribution of the SESS flows will not be required until after 2030.
- Construction of the SESS system is not likely to impact the river valley or the Gold Bar community as these connections are at a distance and made using underground construction methods.

PROVIDING MORE

PLANNING FOR FUTURE FLOWS

WHY DO WASTEWATER PLANTS REQUIRE A BUFFER ZONE AND WILL IT IMPACT US?

- As per provincial design guidelines buffer zones are required for mechanical wastewater treatment plants only to prevent the occurrences of objectionable odours.
- In regards to setback distances from GBWWTP, buffer zones or setback distances are design standards for new infrastructure. Setback distances are designed to mitigate potential odour impacts to the community.
- This requirement was first considered as part of provincial design guidelines in 1976, approximately 20 years after the plant was built and about 15 years after residents had moved in closer to the plant.
- EPCOR understands the importance of odour reduction and will submit plans to ensure that we are continuing to decrease odour impacts beyond the fenceline.
- The proposed air quality monitoring station will be used to demonstrate compliance with Alberta Ambient Air Quality Objective. This should address any concerns related to insufficient buffer zone or setback distance.



PROVIDING MORE

PLANNING FOR FUTURE FLOWS

YOUR FEEDBACK: PUBLIC ENGAGEMENT

- EPCOR plans to continue its public engagement to refine and finalize the Integrated Resource Plan for the Gold Bar WWTP.
  - What additional public engagement tactics do you recommend we use to involve neighbours and other stakeholders?
  - What additional information do you recommend be shared with stakeholders?
- **When the City leads engagement on SESS in the future, what information or tactics would you like to see?**

PROVIDING MORE

SIGN UP FOR A DISCUSSION ON THIS TOPIC

SAFETY & HYGIENE PLAN (PARKING LOT & OPERATIONS CENTRE)

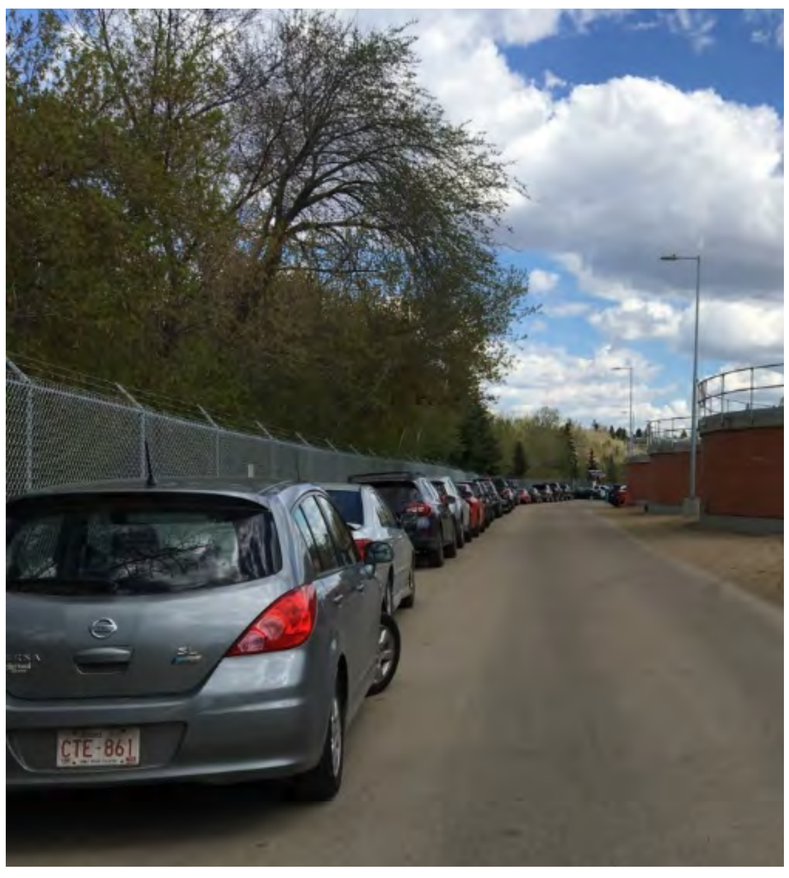
HOW DO WE ENSURE SAFE MOVEMENT ON SITE WHILE IMPROVING WORKER HYGIENE AND SAFETY?

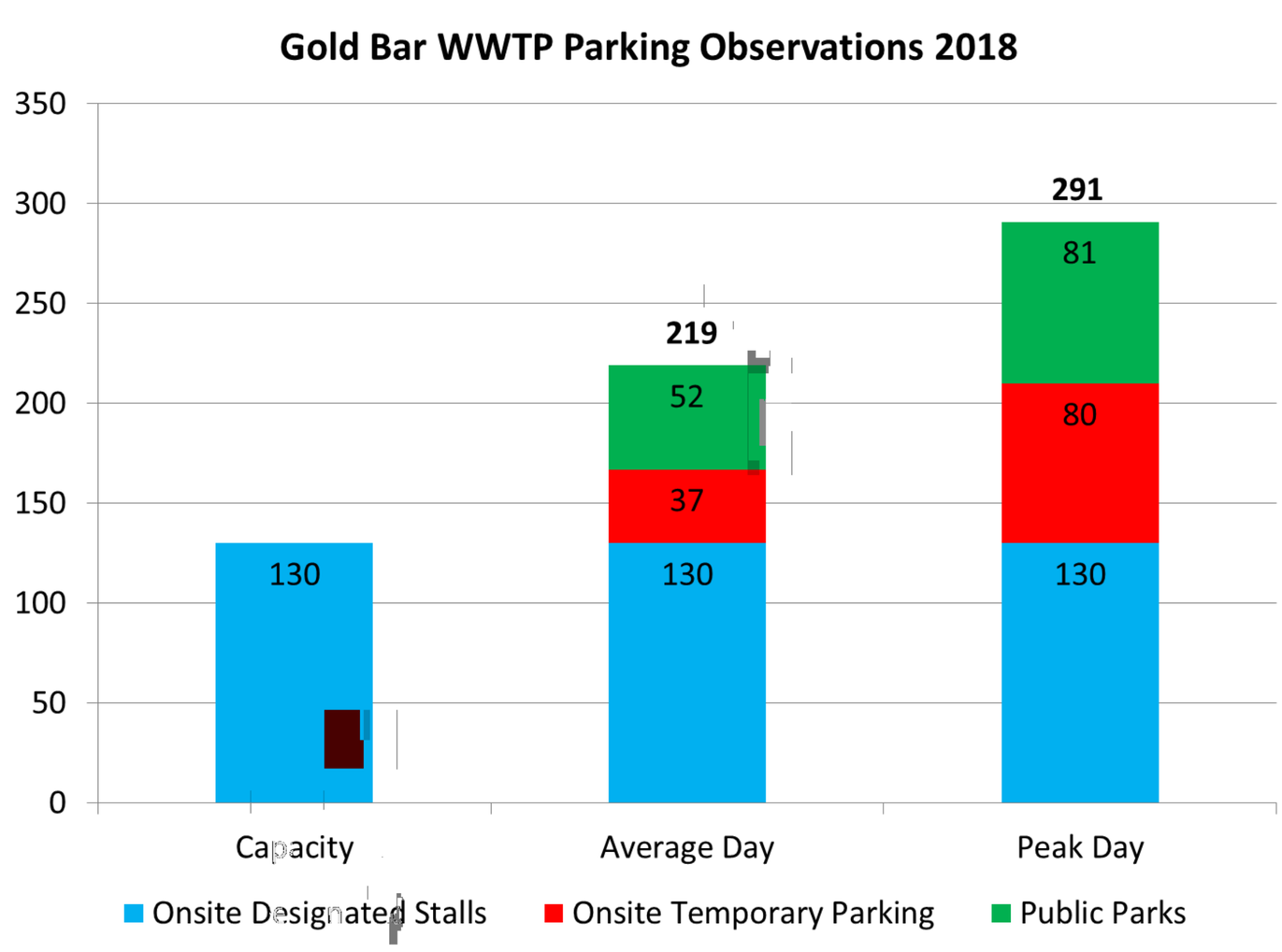
DEFINE THE GOAL

1. **Ensure safe movement on-site.** Develop a plan for on-site vehicle and people movement that improves worker safety.
    - Relocate vehicle parking away from congested active treatment / process areas of the plant, and near support facilities
2. **Improve worker hygiene and safety.** Develop a plan for the location of non-process buildings and hygiene facilities that improves worker safety and limits health risks.
    - Develop acceptable locker / shower facilities
    - Relocate support facilities away from congested active treatment / process areas of the plant
    - Use opportunity to relocate support facilities within the fenceline as they require rehabilitation or improvement

CURRENT STATE: SAFE MOVEMENT

- Up to 210 employees and visitors park on site (130 in designated stalls and 80 in temporary or non-designated stalls)
- About 50-80 contractors are using Gold Bar Park and Capilano Park lots
- This is **not expected to grow** for the foreseeable future





- Most of the designated parking and temporary parking is near active treatment and process areas at the centre of the plant which creates significant safety risks including traffic congestion and increased pedestrian-vehicle interaction.

DESIRED FUTURE STATE: SAFE MOVEMENT

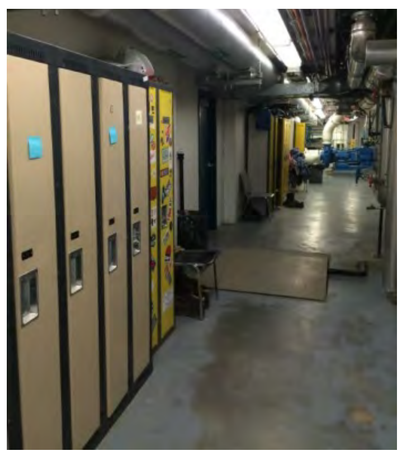
Desired future state: Provide 190 – 220 on-site parking stalls for employees and contractors

- Locate away from active treatment and process areas
- Locate near work place

In this future state, there would continue to be some overflow parking by contractors in the adjacent City parks.

CURRENT STATE – HYGIENE AND SAFETY

- In 2015 EPCOR completed a study which assessed the risks to employees working with wastewater and its biological hazards
- A 2017 review recommended specific facility improvements
- Current facilities do not have proper separation of clean and dirty clothing (having showers between clean lockers and dirty lockers)
- Some locker and shower facilities require staff to walk through process areas, and lockers themselves are in process hallways



FUTURE STATE - HYGIENE AND SAFETY

Recommendations for Staff Hygiene Facilities (from study in 2017)

- Facilities should be available to keep street clothes and personal items separate from PPE and work clothes
- Shower and hand washing facilities need to be available for people to be able to clean up after contact with wastewater
- Locker rooms should have storage space for boots that is separate and at floor level or at bottom of lockers

SAFE MOVEMENT/HYGIENE AND SAFETY – OPTIONS OVERVIEW

Options Overview

- **Four options** have been developed to meet the hygiene and safety goals
- Each of the options includes **on-site parking in a defined location**, and **changing and shower facilities in a place separate from process areas.**

The main variables between the options are:

- The **location** of parking and hygiene facilities
- The **sizing** and type of **structure**
- The **cost** to implement
- The implications of location and sizing decisions
  - On **land use** inside and outside the fenceline
  - On the **timespan** or **complexity** of implementation
  - On the **potential community impact** (proximity, visibility, traffic)
  - On the **ability to add technologies or processes** in the future
  - On **future maintenance and construction** (e.g. access to laydown areas)

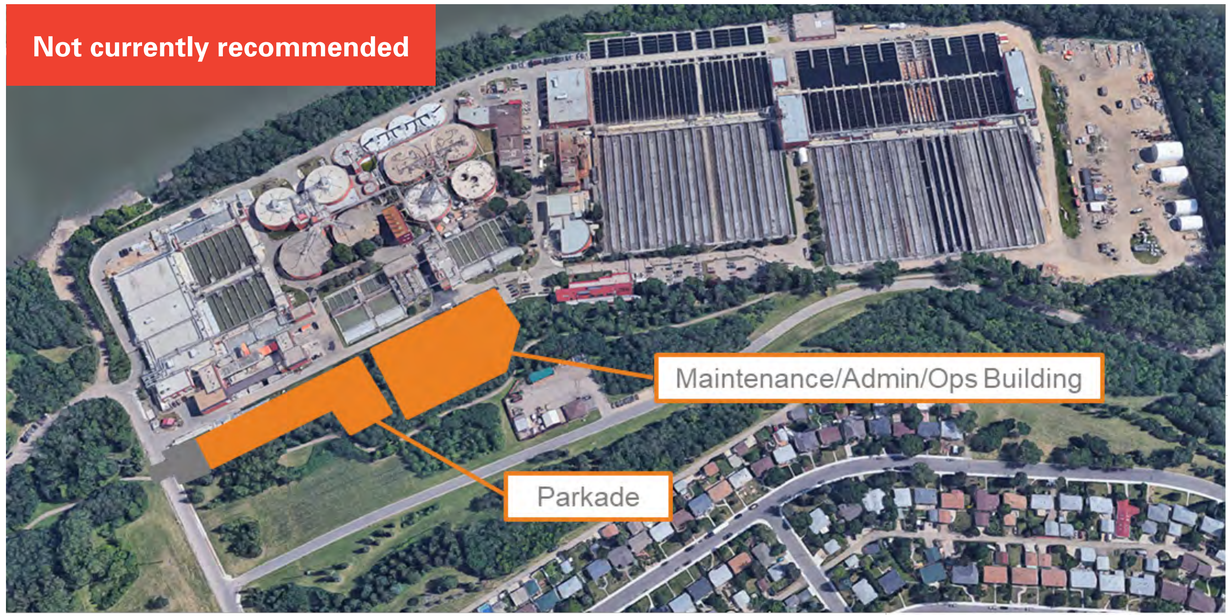
OPTION 1: ORIGINAL PROPOSAL

Parking:	• Surface parking lot with 220 stalls
Buildings:	• Operations Centre: three story, Mtc/Ops lockers, HEI Office, Control Room • Maintenance/Admin offices (Future)
Other:	• City Parks Yard relocated elsewhere • Nordic Ski Club relocated • Mountain bike trail stays as-is but would be relocated and rebuilt in the future • Parking accessible to public after daytime work hours

OPTION 2: PARKS YARD PARKADE

Parking:	• Build a 220 stall three-story parkade on top of the City Parks Yard, reducing the footprint used within Gold Bar Park
Buildings:	• Operations Centre: three story, Mtc/Ops lockers, HEI Office, Control Room • Maintenance/Admin offices (Future)
Other:	• City Parks Yard relocated elsewhere • Nordic Ski Club relocated • Mountain bike trail stays as-is but would be relocated and rebuilt in the future

Not currently recommended



OPTION 3: PARKADE NORTH OF TRAIL

Parking:	• Build an elongated 220 stall parkade north of the trail, reducing the footprint used within Gold Bar Park and moving the structures away from the road
Buildings:	• Maintenance/Admin/Ops Building
Other:	• City Parks Yard stays as-is • Nordic Ski Club stays as-is • Mountain bike trail relocated and rebuilt

OPTION 4: INSIDE FENCE AT EAST END

EPCOR's Recommended Option

Parking:	• Build a 150 stall surface parking lot at east end, and use 45 stall surface lot stalls in the south-central area near the new Ops Centre. Reduce the laydown area
Buildings:	• Operations Centre: one story, inside the fenceline • Maintenance/Admin offices moved from the centre to the east end, inside the fence
Other:	• City Parks Yard and Nordic Ski Club unchanged. No development outside the existing fenceline. Main entrance moved to east end of site (arriving vehicles will now use Gold Bar Park Road; exiting vehicles are unchanged).

DESIGN PRINCIPLES

EPCOR has identified the following design principles (as shown in colour) as considerations relevant to the design and execution of the Safety and Hygiene project. Do you think any are missing?

Shared Outcomes	QUALITY OF LIFE	SAFETY	RELATIONSHIP	ENVIRONMENT	RELIABLE, RESPONSIBLE, SUSTAINABLE
Design Principles	Accelerate odour reduction	Continuously improve safety	Communicate openly	Continuously improve environmental performance	Continuously maintain reliable operations
	Remain within the existing fenceline	Ensure safe movement on-site	Align operating protocols	Reduce environmental impacts	Plan for a range of scenarios
	Prevent increases to odour and noise	Improve worker hygiene and safety	Engage regularly	Increase resiliency	Prudently manage impacts to ratepayers
	Restore disturbed vegetation	Protect public safety from site-related traffic	Share options and optimize designs	Engage employees and stakeholders	
	Mitigate temporary impacts				

TELL US WHAT YOU THINK

YOUR FEEDBACK: OPTIONS DISCUSSION

- Does one or more of the options stand out as the best way to meet the goal?
- What improvements could be made to EPCOR's recommended option?

WHAT DESIGN ELEMENTS WOULD YOU LIKE TO SEE REFLECTED IN THE PROPOSED PARKING FEATURE AND OPERATIONS CENTRE? (LOOK, FEEL, FEATURES, ETC.)

LOOK OF BUILDING	FEATURES	OTHER

TELL US WHAT YOU THINK

PROVIDING MORE

SIGN UP FOR A DISCUSSION ON THIS TOPIC

ODOUR CONTROL ACTION PLAN

HOW DO WE ACHIEVE ODOUR REDUCTION AT GBWWTP?

DEFINE THE GOAL

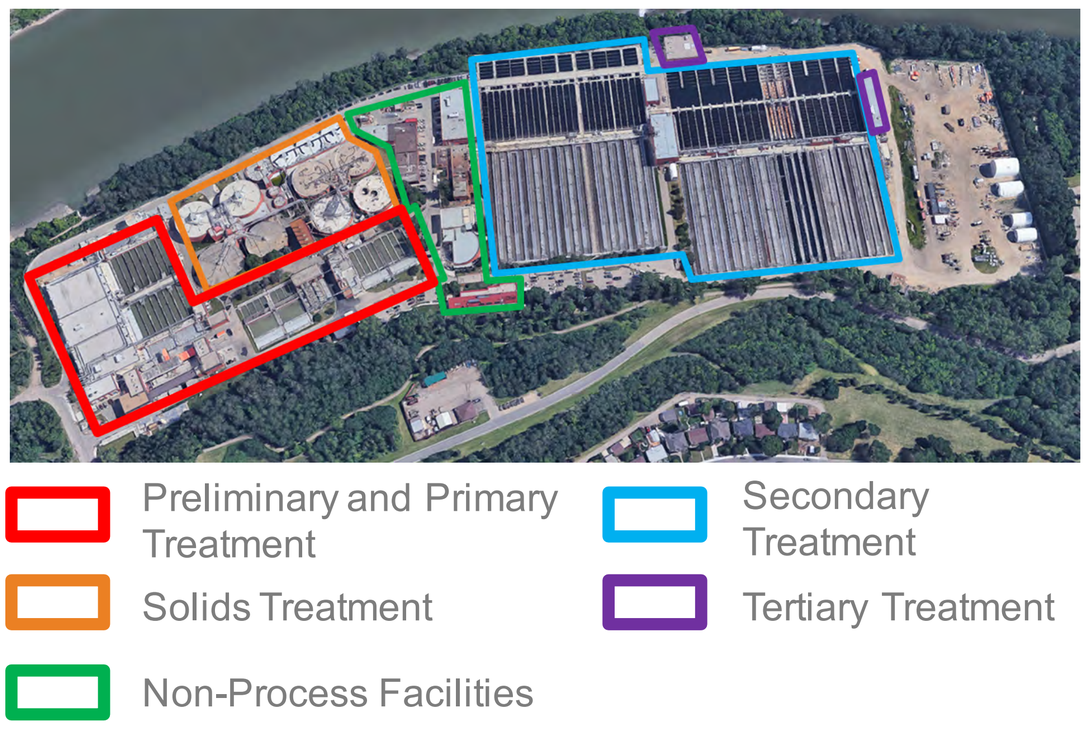
1. **Achieve odour reduction.** Operating and capital improvements at Gold Bar will reduce odour from existing operations and meet current and future odour performance standards.
2. **Monitor, report and comply.** Add new regulatory monitoring to give stakeholders the information they need to judge that the air quality is safe and consistent with a good quality of life and enjoyment of parks and recreation.
3. **Prevent increases to odour.** Design the facility to be able to handle future volume changes without increases in odour.

PROVIDING MORE

ODOUR ACTION PLAN

CURRENT STATE: ODOUR

- Majority of the odour generation comes from the preliminary and primary treatment buildings (red area), with secondary sources from solids treatment buildings (orange area)

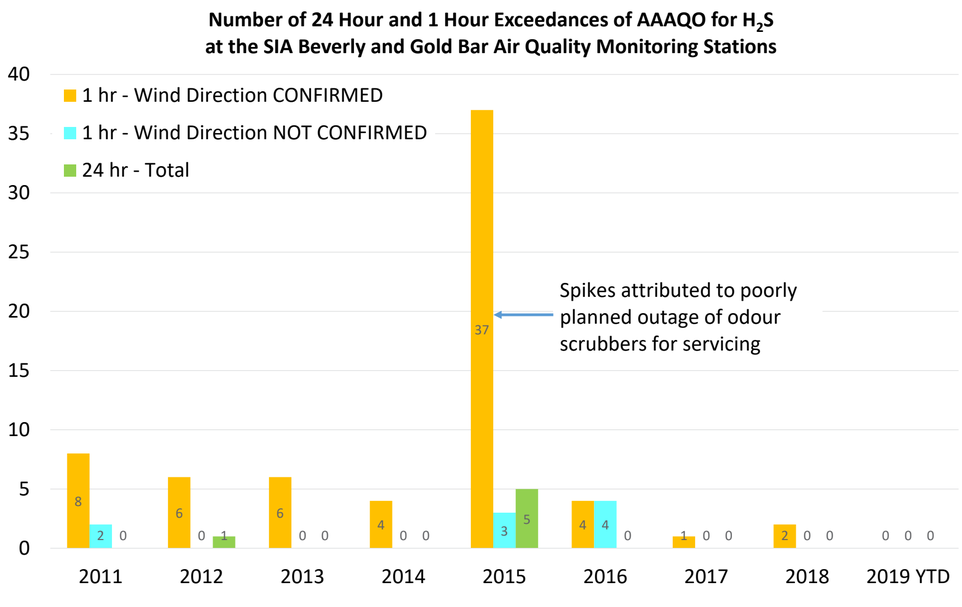


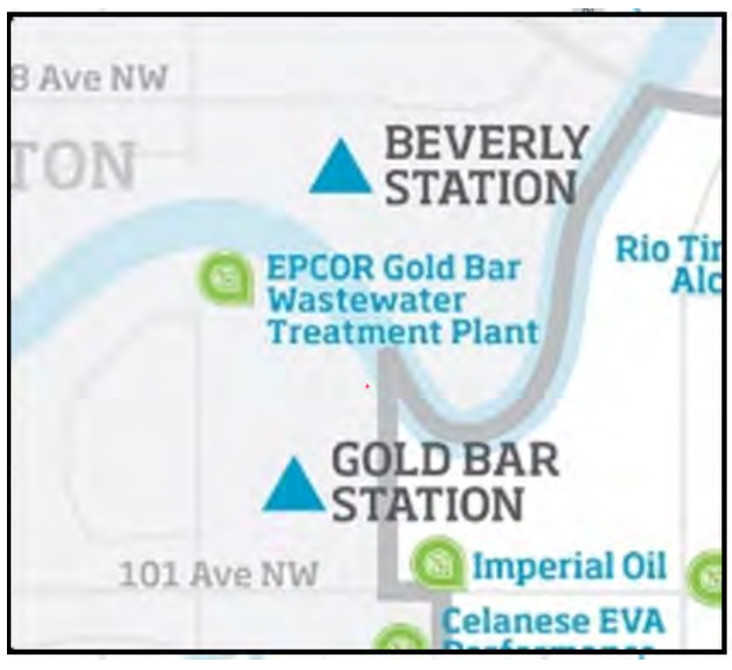
Key historical sources of odour:

- EPT Clarifiers
- Ineffective Scrubbers
- Headworks Buildings
- Primary Clarifiers
- Fugitive Sources (overhead doors, unsealed process and foul air ducting, etc.)

Alberta Ambient Air Quality Objective:

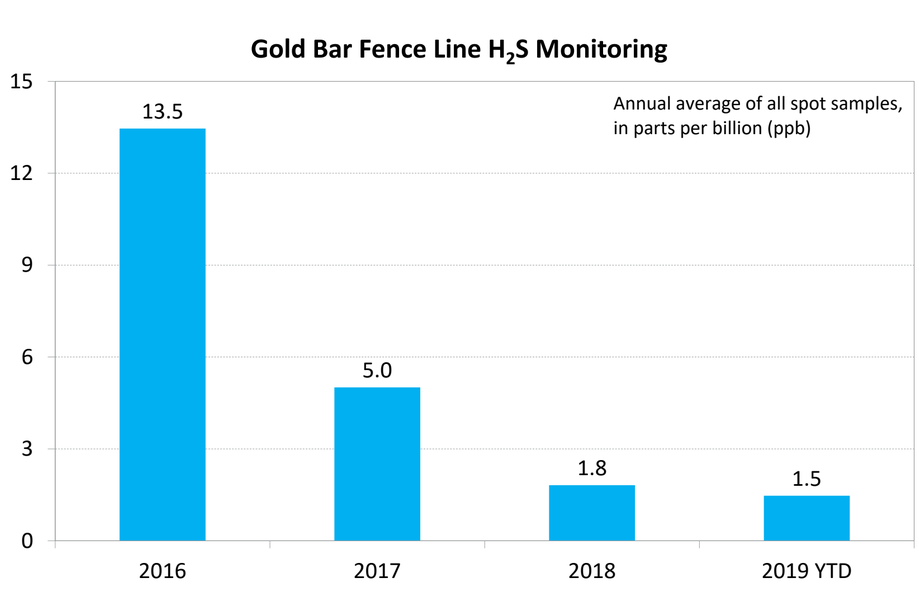
- An average of no more than 10 parts per billion over a one hour period, or 3 parts per billion over a 24-hour period
- Ambient air quality is monitored at the Beverly and Gold Bar stations.
- Action Plan implemented following exceedances in 2015 – significant improvement since then





Spot Monitoring

- **Spot Monitoring Samples** taken from 8 locations at the fenceline also show significant reductions in odour emissions.
- This has also shown marked improvement



UPDATE ON COMPLETED ODOUR PROJECTS

A $10 million series of projects has been completed to date and has helped to significantly reduce odour emissions:

- Sealed Enhanced Primary Treatment clarifiers
- Upgraded ventilation and odour collection
- Scrubber upgrades

DESIRED FUTURE STATE: ODOUR REDUCTION

Current State

Odour levels

- Odour exceedances have been reduced at the two monitoring stations
- Spot monitoring at the fenceline also shows reductions

Monitoring and Reporting

- Alberta Capital Air Shed publishes real time monitoring results from its stations in Beverly and near Gold Bar School
- EPCOR publishes fenceline spot monitoring results monthly
- There is no continuous air quality monitoring at the fenceline or in the adjacent part of Gold Bar Park

Desired Future State

Odour levels

- Odour levels consistently meet current and future standards, and are safe for human health and recreation

Monitoring and Reporting

- Additional continuous air quality monitoring is in place closer to the fenceline
- Results are available in real time in a format that is useful for stakeholders
- New regulatory monitoring and reporting give stakeholders the information they need to judge that the air quality is safe for human health and recreation

ODOUR ACTION PLAN OVERVIEW

- **Additional projects** are being implemented to further reduce odour and ensure compliance
- In conversation with Alberta Environment and Parks (AEP) about updating approval:
  - A new **air quality monitoring station** is under discussion and we would like your input on location and mitigating impacts
  - **New regulatory performance standards** are proposed related to the **performance of odour control equipment** and **ambient air quality**

ADDITIONAL ODOUR PROJECTS

The following capital and operating initiatives will further reduce odour from existing operations, and meet current and future odour performance standards.

Action	Description	Cost	Status
Odour Monitoring System	Includes installation of weather and air quality monitoring stations	$1.0 M	Design in progress
EPT Scrubber Upgrades	Redesign existing EPT Scrubber and install additional scrubber if necessary for revised capacity and better performance	$8.4 M	Design in progress
Grit and Screen Buildings Ventilation Upgrades	Upgrade ventilation and implement odour control in headworks buildings	$2.2 M	Design in progress
Seal Fermenter Roofs	Seal Fermenter Roofs in order to prevent fugitive odour emissions.	$0.5 M	Design in progress
Subtotal		**$12.1 M**	

PROVIDING MORE

ODOUR ACTION PLAN

NEW PERFORMANCE STANDARDS

EPCOR is working with Alberta Environment & Parks to establish odour control requirements, reliable monitoring and effective reporting.

Proposed updates to the Gold Bar **Operating Approval** would:

- Add **odour scrubber operating performance** limits
- Add new **continuous monitoring and reporting** requirements for air entering and exiting the **odour scrubbers**
- Add standard requirements to **control fugitive emissions**
- Add **air monitoring and reporting at the fenceline**
- Require the **Alberta Ambient Air Quality Objectives be met** in close proximity to the south fenceline of the plant (new AQM station)

NEW AIR MONITORING STATION

A new continuous monitoring station between the Plant and the nearest receptors (houses along 109 A Avenue) will be developed

New Monitoring Station

Existing Monitoring Station

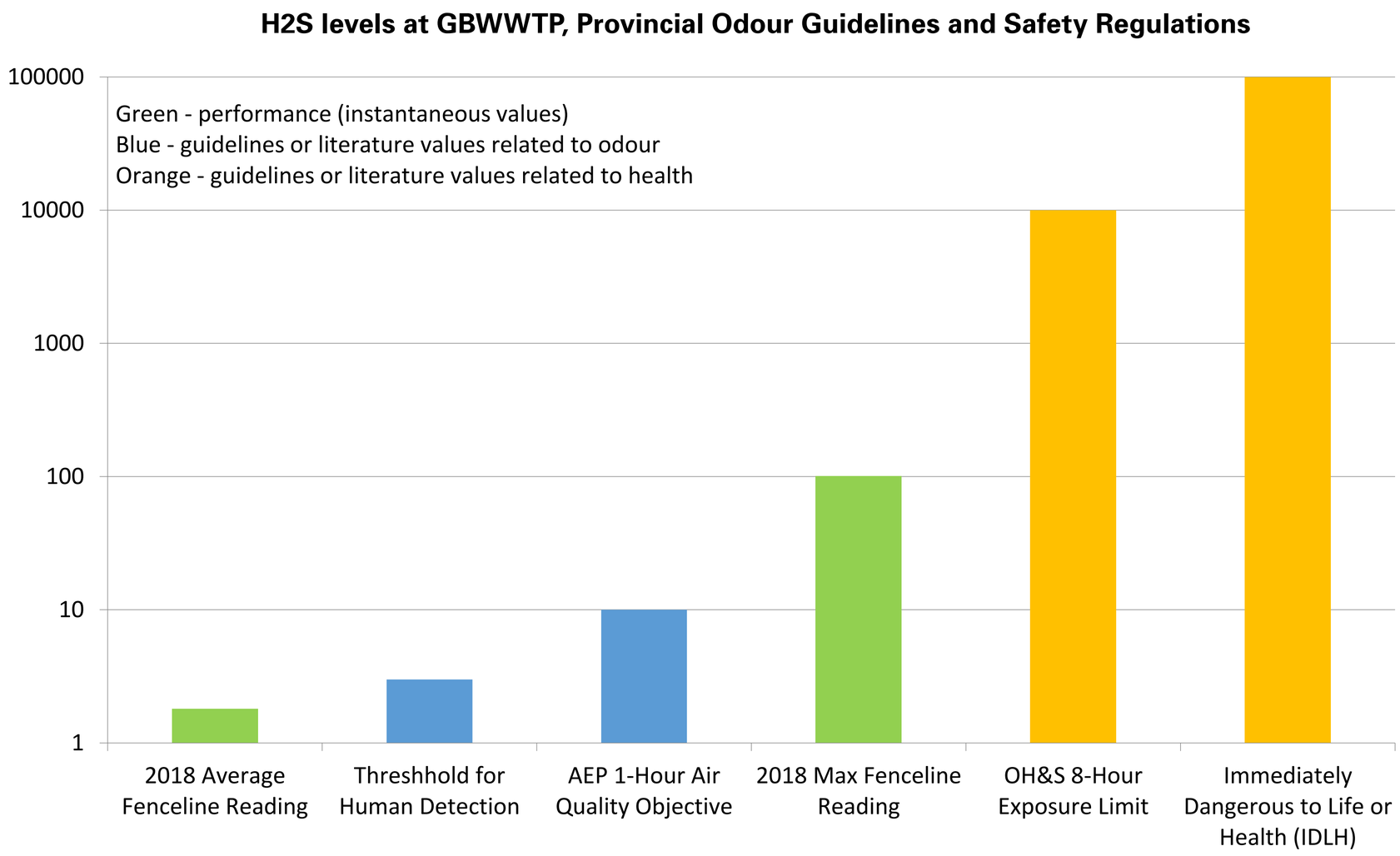
LOCATION OF NEW MONITORING STATION

1. *Where would you site an additional monitoring station?*
2. *Is it acceptable or desirable to place a monitoring station within adjacent parkland?*

ODOUR HEALTH AND SAFETY

WHERE DOES THE SMELL COME FROM?

- Due to the raw wastewater that flows through Gold Bar it is normal for odours to occasionally result. Most of these odours are related to hydrogen sulphide (H_2S). This gas is naturally produced by biological activity in wastewater and is characterized by a rotten-egg smell that can be detected even at very low levels.
- H_2S levels in the air at the plant can vary depending on a variety of factors including, when maintenance work is happening that involves cleaning the tanks, removing grit bins from the site, or opening the overhead doors.



DESIGN PRINCIPLES

EPCOR has identified the following design principles (as shown in colour) as considerations relevant to the design and execution of the Odour Control Action Plan. Do you think any are missing?

Shared Outcomes	QUALITY OF LIFE	SAFETY	RELATIONSHIP	ENVIRONMENT	RELIABLE, RESPONSIBLE, SUSTAINABLE
Design Principles	Accelerate odour reduction	Continuously improve safety	Communicate openly	Continuously improve environmental performance	Continuously maintain reliable operations
	Remain within the existing fenceline	Ensure safe movement on-site	Align operating protocols	Reduce environmental impacts	Plan for a range of scenarios
	Prevent increases to odour and noise	Improve worker hygiene and safety	Engage regularly	Increase resiliency	Prudently manage impacts to ratepayers
	Restore disturbed vegetation	Protect public safety from site-related traffic	Share options and optimize designs	Engage employees and stakeholders	
	Mitigate temporary impacts				

TELL US WHAT YOU THINK

YOUR FEEDBACK: CURRENT STATE AND DESIRED FUTURE STATE

- What other information would be useful to you or other stakeholders?
- **How could we improve how we communicate about odour?**

PROVIDING MORE

SIGN UP FOR A DISCUSSION ON THIS TOPIC

REDUCING FLARING AND GHG EMISSIONS: RENEWABLE NATURAL GAS

HOW DO WE SUPPORT OPPORTUNITIES TO REDUCE ENVIRONMENTAL IMPACTS, IMPROVE SUSTAINABILITY, ENHANCE RESOURCE RECOVERY AND CONTINUOUSLY IMPROVE ENVIRONMENTAL PERFORMANCE?

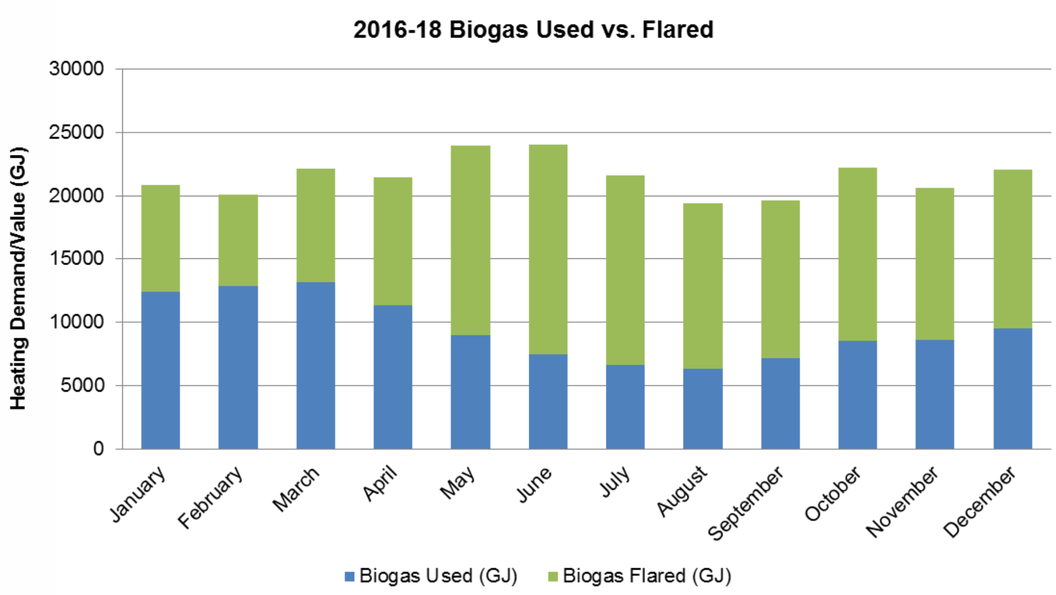
DEFINE THE GOAL

Pollution is prevented. The impact of Gold Bar on air, land, water, climate and ecosystems is reduced.

1. **Reduce environmental impacts.** Prioritize investments and operating practice changes that reduce Gold Bar 's environmental impact, with a focus on the reduction of greenhouse gas emissions, the protection of water quality and the protection of parkland.
2. **Improve sustainability and enhance recovery of renewable resources.**
3. **Continuously improve environmental performance.** Assess current environmental performance, evolving standards and emerging risks, and propose initiatives that maintain regulatory compliance and improve environmental performance.

CURRENT STATE: BIOGAS AND FLARING

- **Biogas is a by-product of wastewater treatment (mostly solids digestion).**
- **Today, about 44% of the biogas generated in the solids digestion process at Gold Bar is used for heating. About 56% is flared.**
- **Flaring volumes are highest in the summer months, when there is less need to use gas on-site for heating (70% flared).**



Current State

55% of biogas is wasted via flaring - About 150,000 GJ of energy in 2018.

- Generated biogas is used for on-site heating (process and plant heating)
- 70-80% of the plant's heating demand is currently being met using Biogas
- Reduced heating demand and more flaring during summer season
- Contaminants in raw biogas cause maintenance issues with existing boilers

Desired Future State

Nearly all biogas is turned from waste into a useful product

- Conversion into renewable natural gas that can be used by others

The benefits include:

- Reduced flaring and lower air emissions
- Less waste, darker night sky, less odour
- Greenhouse gas reduction, as the use of renewable natural gas displaces consumption of regular natural gas

OPPORTUNITY OVERVIEW: BIOGAS TO RENEWABLE NATURAL GAS

Rather than flaring, technology exists to capture biogas, clean it, and deliver it into the ATCO natural gas distribution system as a source of **renewable natural gas.**

- Upgrading biogas to renewable natural gas would require some additional biogas cleaning and injection equipment on-site, and making an underground connection to the ATCO gas line that runs next to Gold Bar Park Road.
- Delivering gas for off-site use would require an amendment to the Gold Bar operating permit
  - The original permit only allowed biogas for on-site uses (such as heating or renewable power generation)

Option 1 (Previous Consideration – Not recommended)

- Locate in east laydown area
- Conflicts with moving parking and Admin to east end of site, separate from process facilities
- Requires significant gas piping

Option 2 (EPCOR Preference)

- Locate cleaning equipment near digesters where biogas is created (use space currently occupied by primary clarifiers 1 & 2)
- Install biogas storage in the same area

DESIGN CONSIDERATIONS: LOCATION

- The location of biogas equipment on-site impacts the siting of other process and non-process facilities
- Currently biogas is generated and stored in digester headspaces and transported to boilers and flares
- Additional biogas storage may be required to supply Renewable Natural Gas facility without interruption

DESIGN CONSIDERATIONS: INJECTION

- All equipment would be located within the fenceline, and as much as possible within enclosures to minimize noise and visual impact
- The **underground connection** to the ATCO gas system could have **temporary construction impacts** at the east end of Gold Bar Park, and may affect **trees** which would need to be **replaced**

Key Components

- Biogas Cleaning / Compression
- Biogas Storage
- Biogas Piping
- Biogas injection and underground gas pipeline

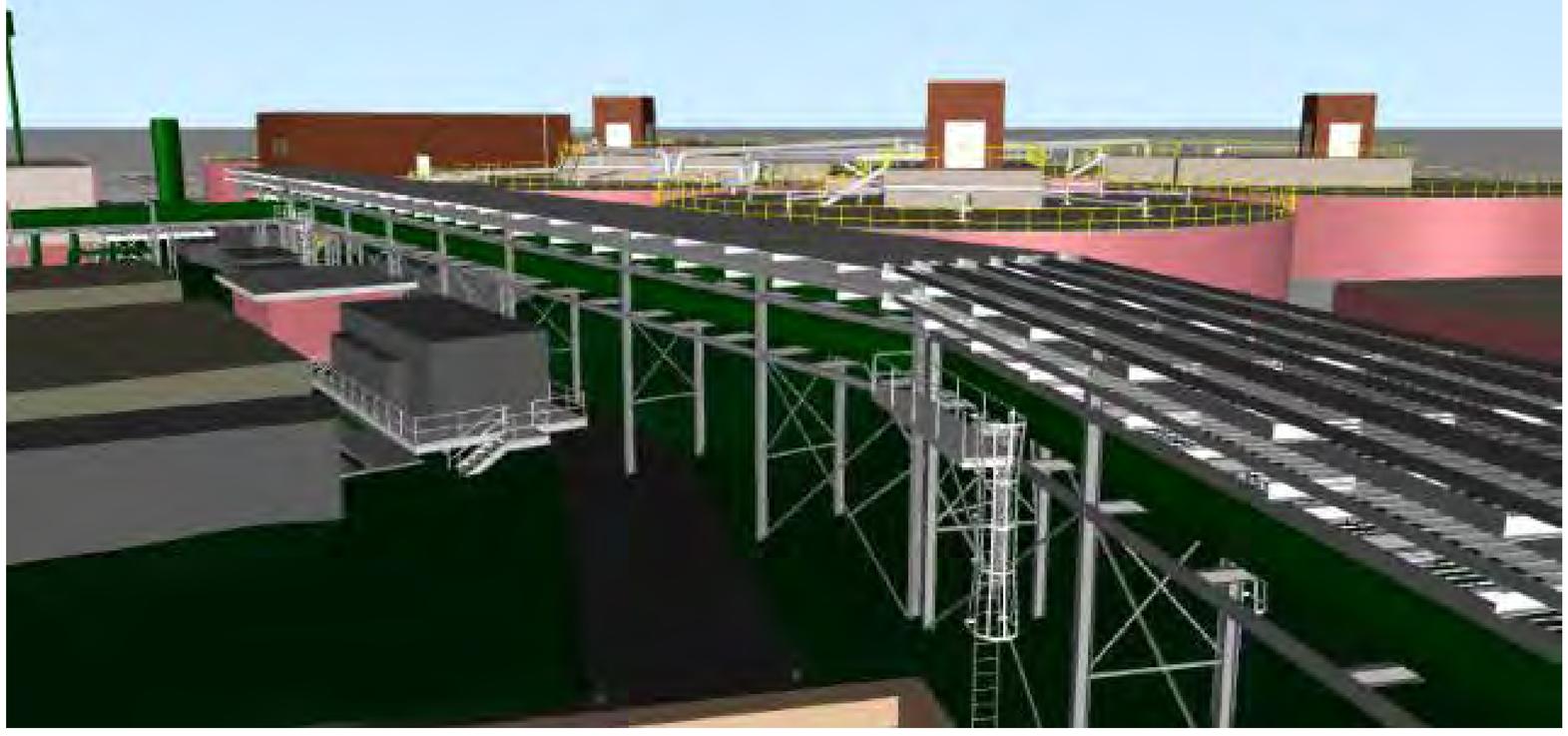
DESIGN PRINCIPLES

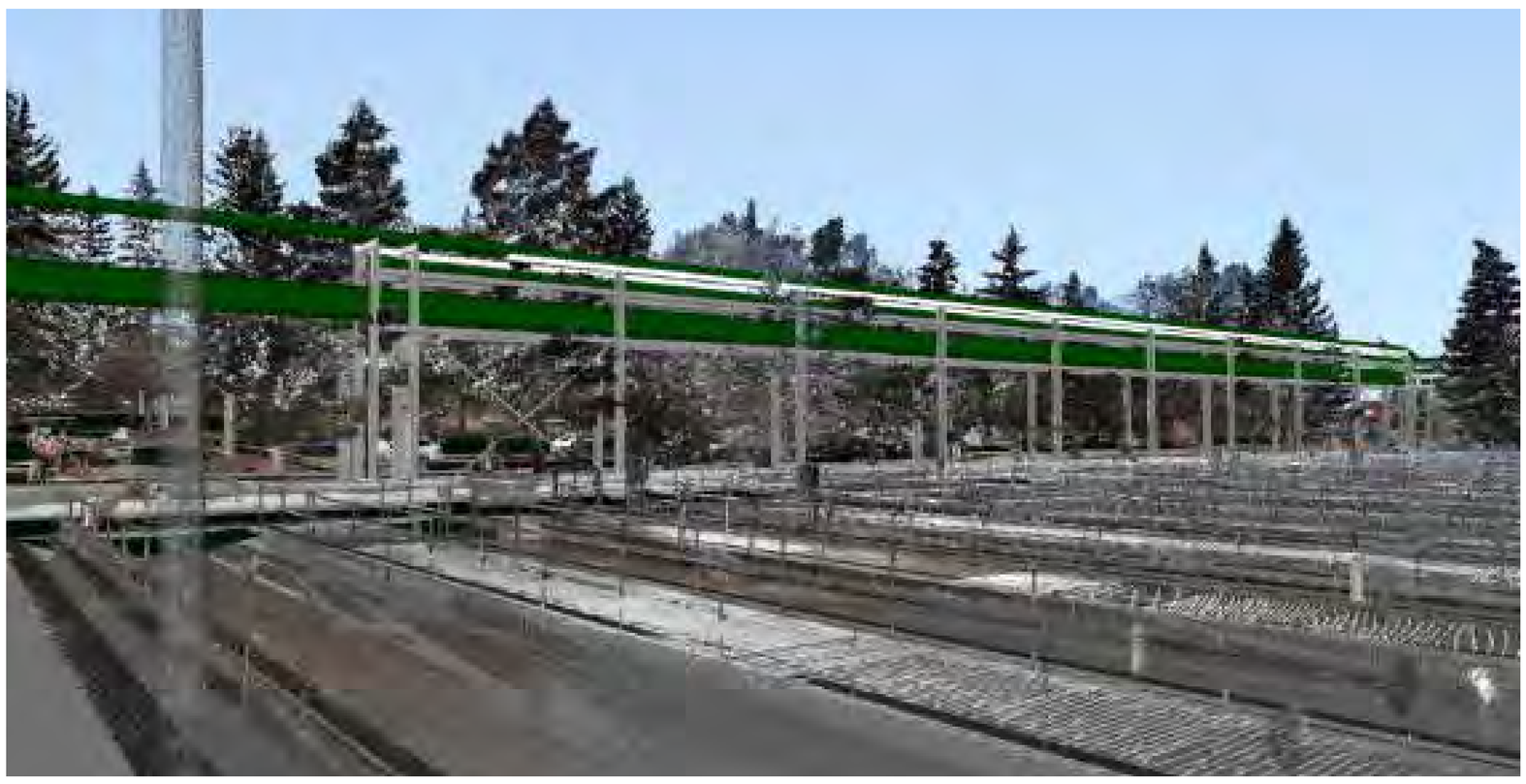
EPCOR has identified the following design principles (as shown in colour) as considerations relevant to the design and execution of the Renewable Natural Gas Project. Do you think any are missing?

	QUALITY OF LIFE	SAFETY	RELATIONSHIP	ENVIRONMENT	RELIABLE, RESPONSIBLE, SUSTAINABLE
Shared Outcomes					
Design Principles	Accelerate odour reduction	Continuously improve safety	Communicate openly	Continuously improve environmental performance	Continuously maintain reliable operations
	Remain within the existing fenceline	Ensure safe movement on-site	Align operating protocols	Reduce environmental impacts	Plan for a range of scenarios
	Prevent increases to odour and noise	Improve worker hygiene and safety	Engage regularly	Increase resiliency	Prudently manage impacts to ratepayers
	Restore disturbed vegetation	Protect public safety from site-related traffic	Share options and optimize designs	Engage employees and stakeholders	
	Mitigate temporary impacts				

TELL US WHAT YOU THINK

PIPE RACK SCHEMATICS & CYLINDRICAL STORAGE UNITS





YOUR FEEDBACK: CURRENT STATE AND DESIRED FUTURE STATE

- What other information would be useful to you or other stakeholders?

YOUR FEEDBACK: OPTIONS DISCUSSION

- Does one or more of the options stand out as the best way to meet the goal?
- What improvements could be made to EPCOR's recommended option?

YOUR FEEDBACK: PUBLIC ENGAGEMENT

- Are there any other public engagement tactics you recommend we use to further involve neighbours and other stakeholders on this subject? (besides notification & web updates)

APPENDIX C

HANDOUTS

LONG RANGE PLANNING

Gold Bar WWTP is able to safely treat all flows that come to it through 2060 while remaining within its existing footprint and fenceline.

1. Gold Bar WWTP has **ample hydraulic capacity** meaning that it is currently sized to handle liquid flows through 2060. Growth in sanitary flows is expected to be flat due to the impact of water conservation.

2. Gold Bar WWTP also has **spare solids treatment capacity** in the digesters on site to treat solids growth through 2060. Solids loading to the plant is expected to increase in proportion to population growth.

3. As the amount of municipal waste grows with population and flows are moderated due to water conservation, wastewater strength is expected to increase over time. Gold Bar WWTP will **have to increase its nutrient removal capacity** to keep pace. This is accomplished by retrofitting existing secondary clarifier tanks with membrane technology. Current projections indicate that the earliest this would be needed is 2027. These retrofits will be required at a slower pace if future growth in sanitary flows from the SESS system is redirected to ACRWC.

Starting in 2027 EPCOR will start retrofitting existing secondary clarifier tanks with membrane technology.

Membrane technology that would be inserted into existing tanks.

SAFETY & HYGIENE

The following is EPCOR's recommended option to ensure safe movement on site and improve worker hygiene and safety.

PARKING

- Build a 150 stall surface parking lot at east end, and use 45 surface stalls in the south central area near the new Operations Centre. Reduce the laydown area.

BUILDINGS

- Operations Centre: one story, inside the fenceline.
- Maintenance/Admin offices moved from the centre to the east end, inside the fence.

OTHER

- City Parks Yard and Nordic Ski Club unchanged.
- No development outside the existing fenceline.
- Main entrance moved to east end of site (arriving vehicles will now use Gold Bar Park Road; exiting vehicles are unchanged).

ODOUR ACTION PLAN

ODOUR LEVELS

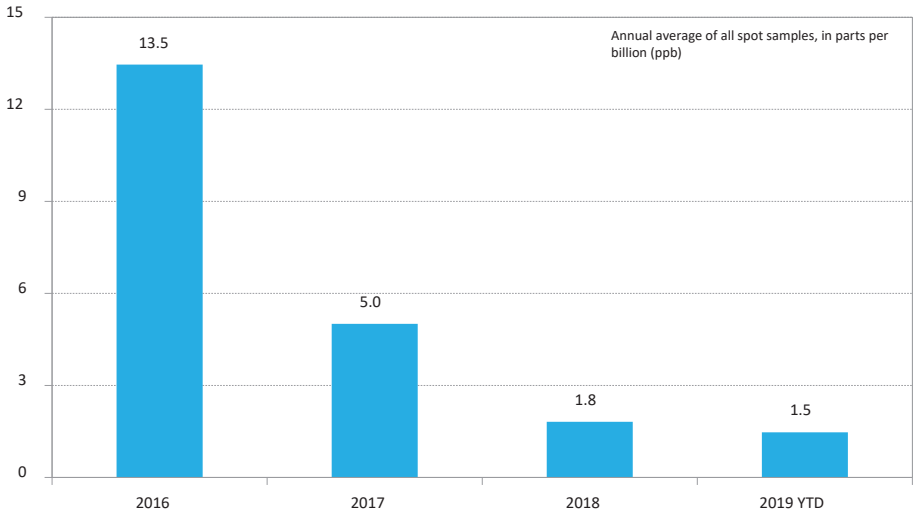
- Odour exceedances have been reduced at the two monitoring stations (Gold Bar and Beverly).
- Spot monitoring at the fenceline also shows reductions.

MONITORING AND REPORTING

- EPCOR publishes fenceline spot monitoring results monthly.
- There is no continuous air quality monitoring at the fenceline or in the adjacent part of Gold Bar Park.

EPCOR will be initiating additional capital and operating initiatives that will further reduce odour from existing operations, and meet current and future odour performance standards.

Gold Bar Fence Line H_2S Monitoring



RENEWABLE NATURAL GAS

Rather than flaring, technology exists to capture biogas on site, clean it, and deliver it into the ATCO natural gas distribution system as a source of **renewable natural gas.**

Upgrading biogas to renewable natural gas would require some additional biogas cleaning and injection equipment on-site, and building an underground connection to the ATCO gas line that runs next to Gold Bar Park Road.

EPCOR's recommended design is shown below:

- All equipment would be located within the fenceline

EPCOR'S GOLD BAR DESIGN PRINCIPLES

The following Shared Outcomes and Design Principles were collaboratively created by EPCOR and the Gold Bar Citizen Planning Committee.

These Design Principles define how EPCOR will achieve the goals described in the five Shared Outcome Statements and provide a framework to guide the evolution of the site.

They will be incorporated into the Integrated Resource Plan (IRP) and demonstrate our commitment to being a good neighbour and keeping future growth within the existing fenceline.

Shared Outcomes					
	QUALITY OF LIFE	SAFETY	RELATIONSHIP	ENVIRONMENT	RELIABLE, RESPONSIBLE, SUSTAINABLE
Design Principles	Accelerate odour reduction	Continuously improve safety	Communicate openly	Continuously improve environmental performance	Continuously maintain reliable operations
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	Restore disturbed vegetation	Protect public safety from site-related traffic	Share options and optimize designs	Engage employees and stakeholders	
	Mitigate temporary impacts				

APPENDIX D

FEEDBACK FORMS

TELL US WHAT YOU THOUGHT!

Gold Bar Wastewater Treatment Plant Open House

1. How did you hear about the open house? ☐ Mail -20 ☐ Word of mouth -5 ☐ Website -0 ☐ Other -1

2. Were the location and time good for you? ☐ Yes -22 ☐ No -0 ☐ Somewhat -4

3. Did you receive the information you required? ☐ Yes -19 ☐ No -0 ☐ Somewhat -5
   If no, please describe:

   - More information on why EPCOR believes sanitary flow growth to be flat due to water conservation. What kind of water conservation?

4. Was the information provided easy to understand? ☐ Yes -20 ☐ No -0 ☐ Somewhat -6

   - Based upon what population growth estimate? Does it account for densification?

5. Was the information provided relevant? ☐ Yes -22 ☐ No -0 ☐ Somewhat -4

6. If you participated in one of the discussion tables, did you find the information to be valuable? ☐ Yes -8 ☐ No -1 ☐ Somewhat -1 ☐ N/A -15

7. Were you able to discuss your questions or concerns? ☐ Yes -25 ☐ No -0 ☐ Somewhat -1

8. Were EPCOR representatives helpful in answering your questions? ☐ Yes -24 ☐ No - 0 ☐ Somewhat -2

9. Was attending the open house a good use of your time? ☐ Yes -23 ☐ No -0 ☐ Somewhat -3

10. Is there anything that you would like more information about? ☐ Yes -6 ☐ No -16
    If yes, please describe:

- SESS Report
- Construction
- Alternative locations for solar project
- Revisit LTP of directional sewage to the Capital Region plant to the NE
- SESS Report – is there a link online?
- Transparency regarding SESS reroute change from AC RWC to Gold Bar. i.e. Corporate profit and expansion

11. Do you have any suggestions for improvement?

- The best LTP is to direct City and area wastewater to the Capital Region site irrespective of short term cost benefit spending 230 million for temporary use is a waste of tax payer funds.
- Expanding Gold Bar is not in the best long term interests.
- Problems with construction noise (always seems to be the same construction going on), plant development significant since we moved in 1989. Suggest you seek ways to mitigate unsightly visual impact of plant i.e. add trees. Recognize that buffer zone does not meet current Alberta standards and develop future plans that adhere to these standards. Recognize we hear all construction noise right down to beeping of vehicles as they back up. I don't know how you mitigate this other than realize this plant is too close to community residences and gradually move to a different plan. Thank you for hosting this open house. I appreciate the fact you took the time to inform us and ask for input.
- I liked the concept of the biogas technology and finding an alternative purpose for waste products from the water treatment process. I have a question regarding compressor noise and flaring for that project compared to current noise levels and flaring.
- Open house with open and honest communication should have been held before any plant modifications were started.
- This communication should have taken place prior to these onside improvements.
- Move the plant.
- Continue community involvement input.
- Keep communication going and be open and honest.
- So many signs and reading it was almost overwhelming. Glad to see feedback was listened to and the parking lot expansion will not be going outside the fence line.
- Yes, there should be far more discussion about water conservation and grey and black water recycling.
- Please don't provide single use cups. There should be alternatives in a space like a golf club.
- Better communication strategy over social media. The whole "Save Gold Bar Park" thing has gotten out of hand. I have no issues with the proposed plans. I am a Capilano resident.

- Things for kids like markers and paper works wonders. Stakeholder meetings should include more than those opposed. I fully support wastewater treatment.
- Everything was great. You have some great projects and staff were exceptionally helpful and knowledgeable in providing information.
- WWTP model like in Center of Excellence.
- Tables were too close.
- Slightly larger walking space between information and tables.
- Questions were answered. Thank you.
- Typo in Design Principles #9 # missing noted to EPCOR Rep. Will have 21 principles not 20.