

Preferred Strategies for the CSRD's SWMP Update

Presentation to PTAC on October 9, 2024

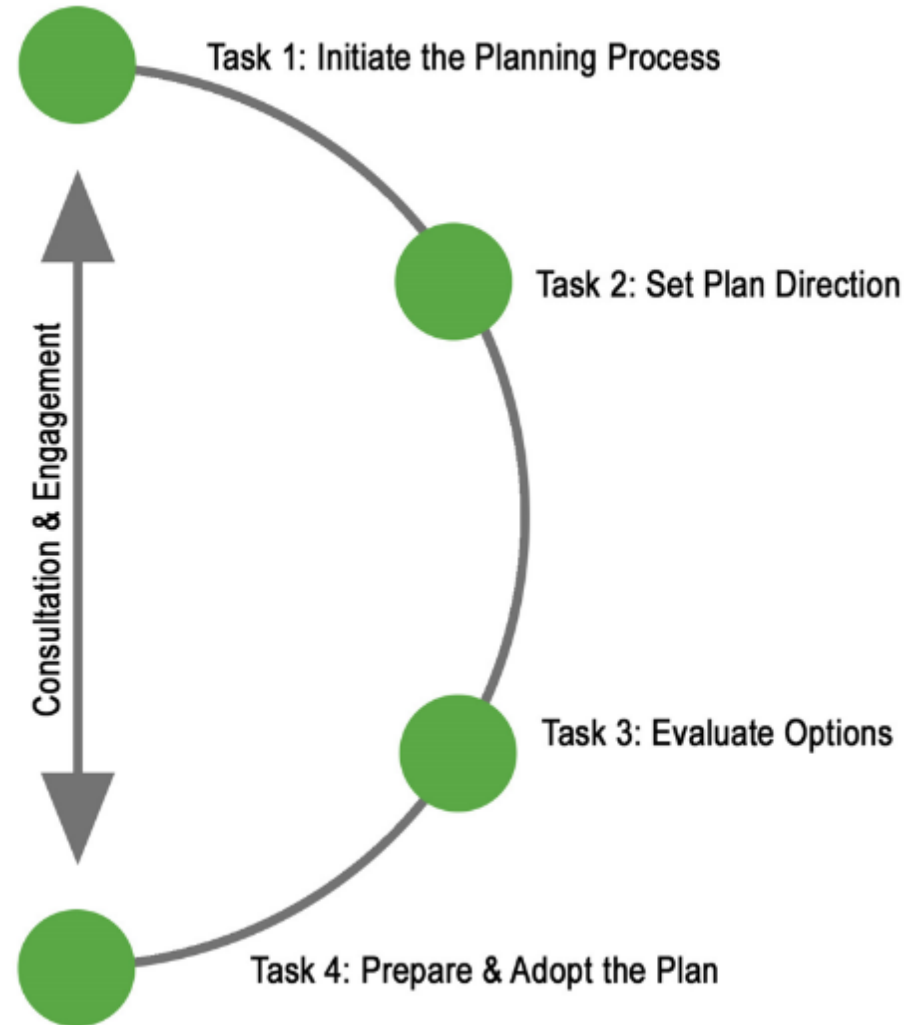


Meeting Outline

- Plan update process (*<5 min*)
- Review ‘what we have heard’ from last meeting (*5 min*)
- Overview of Preferred Strategies (*30 min*)
- Break (*15 min*)
- Group discussions on strategies, actions and priorities (*90 min*)
 - *Activity to prioritize actions*
- Next steps (*5 min*)



Plan Update Process





Non-Sector Specific Issues and Opportunities

PTAC Priorities and Feedback on Strategies

Strategy Overview - What we have heard

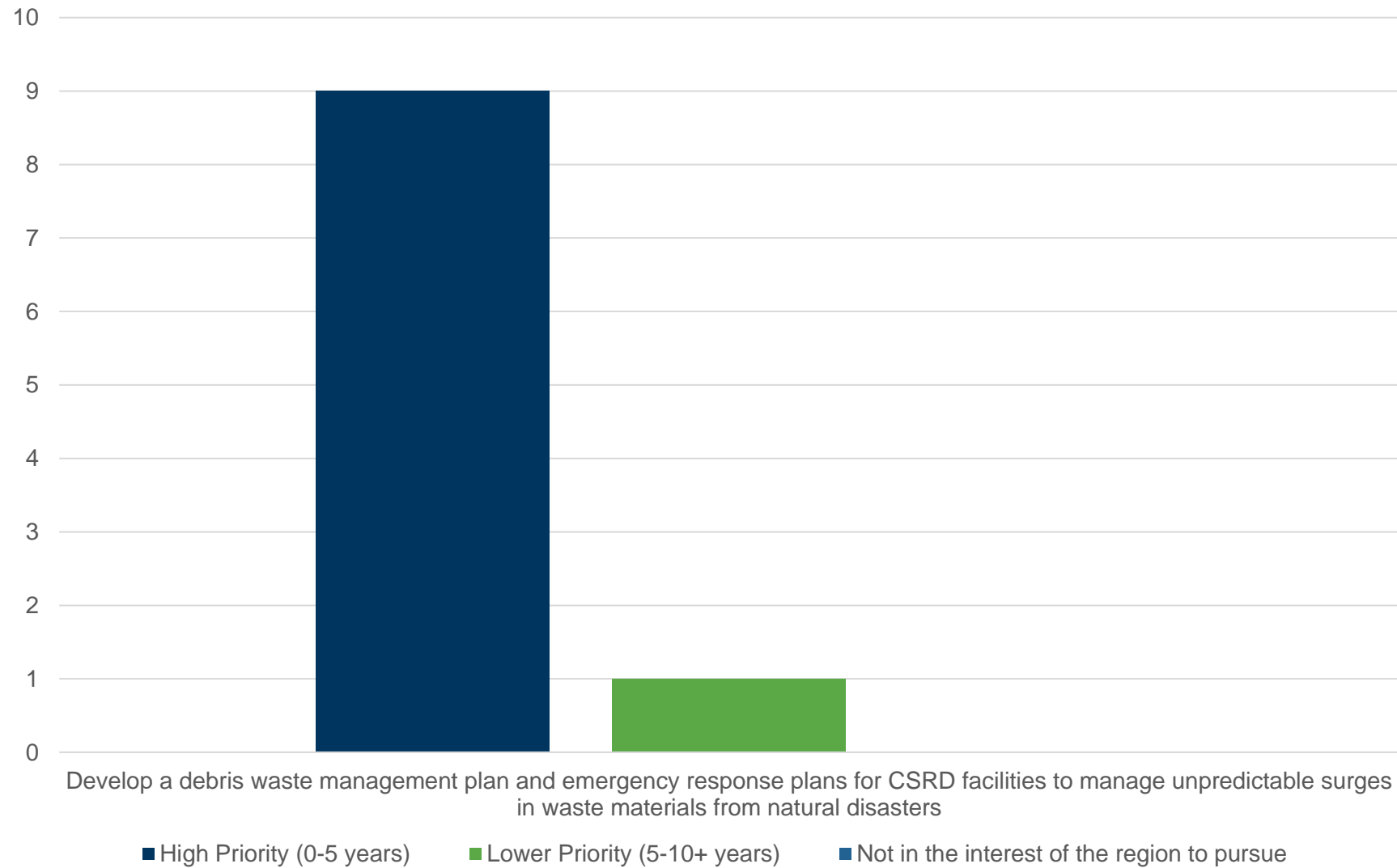
Improve Emergency Debris Management

Prevent Illegal Dumping

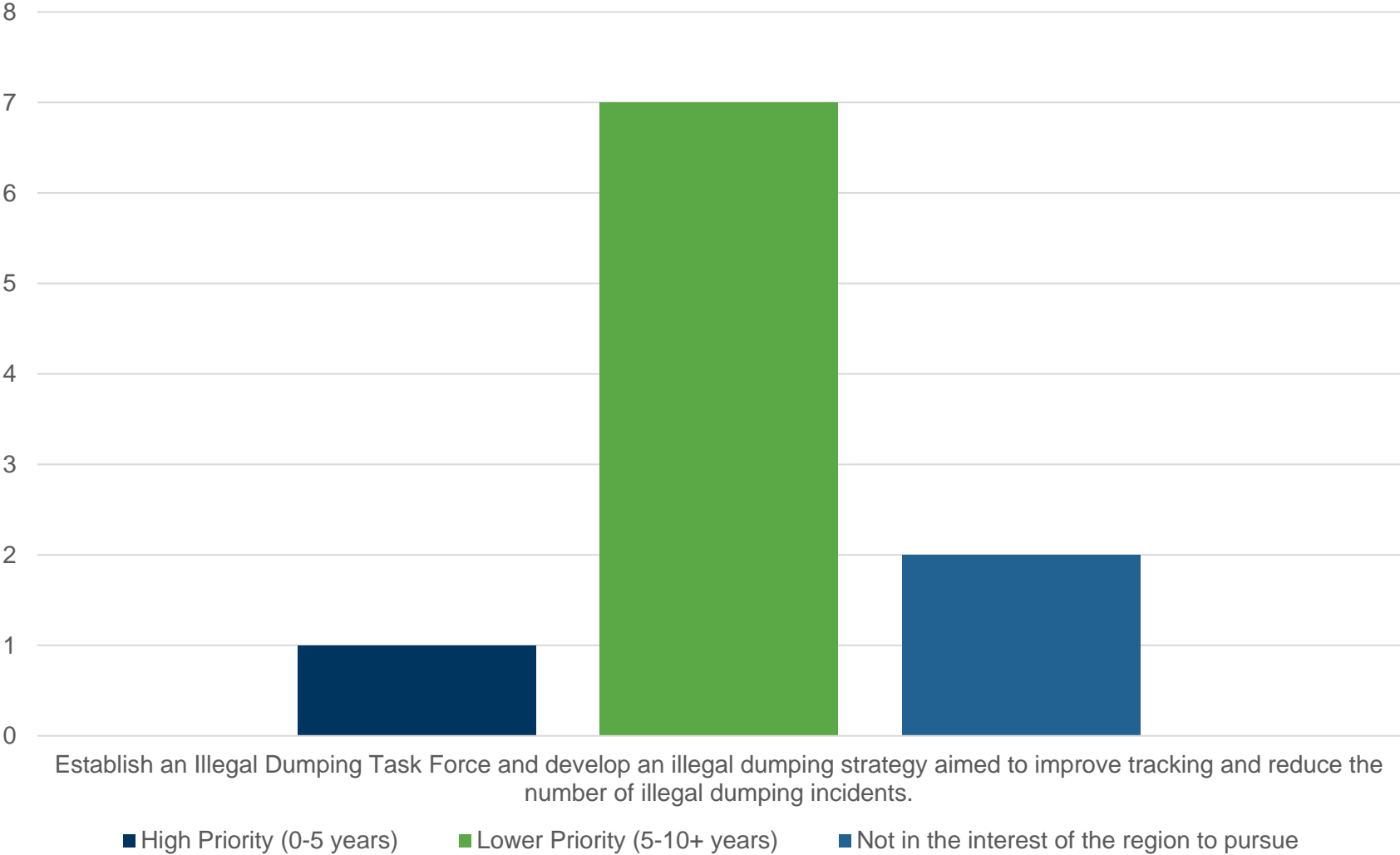
Prevent Wildlife Interactions

Review Innovative Technologies to Maximize Disposal Capacity and reduce GHG Emissions

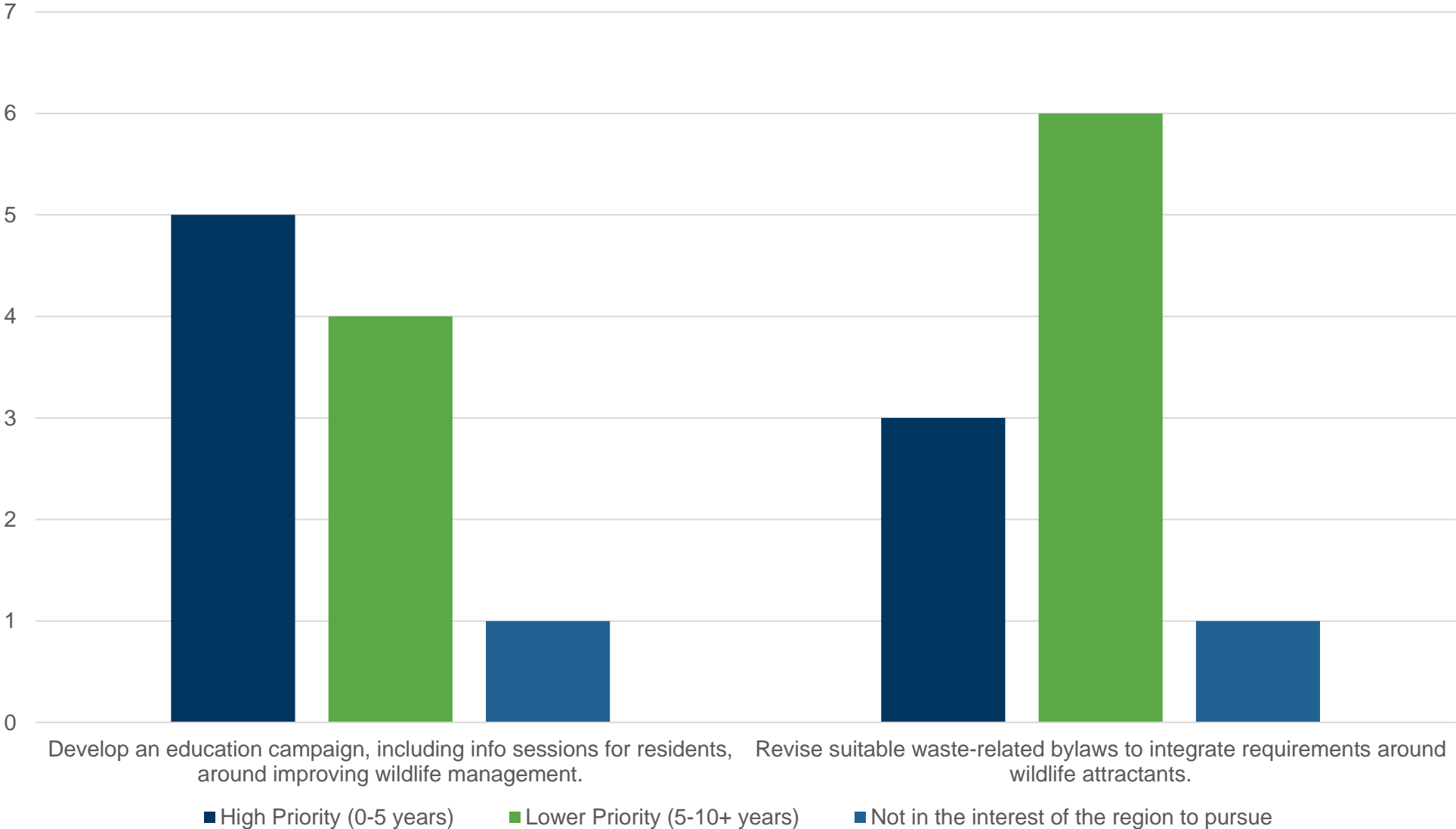
Improve Emergency Debris Management



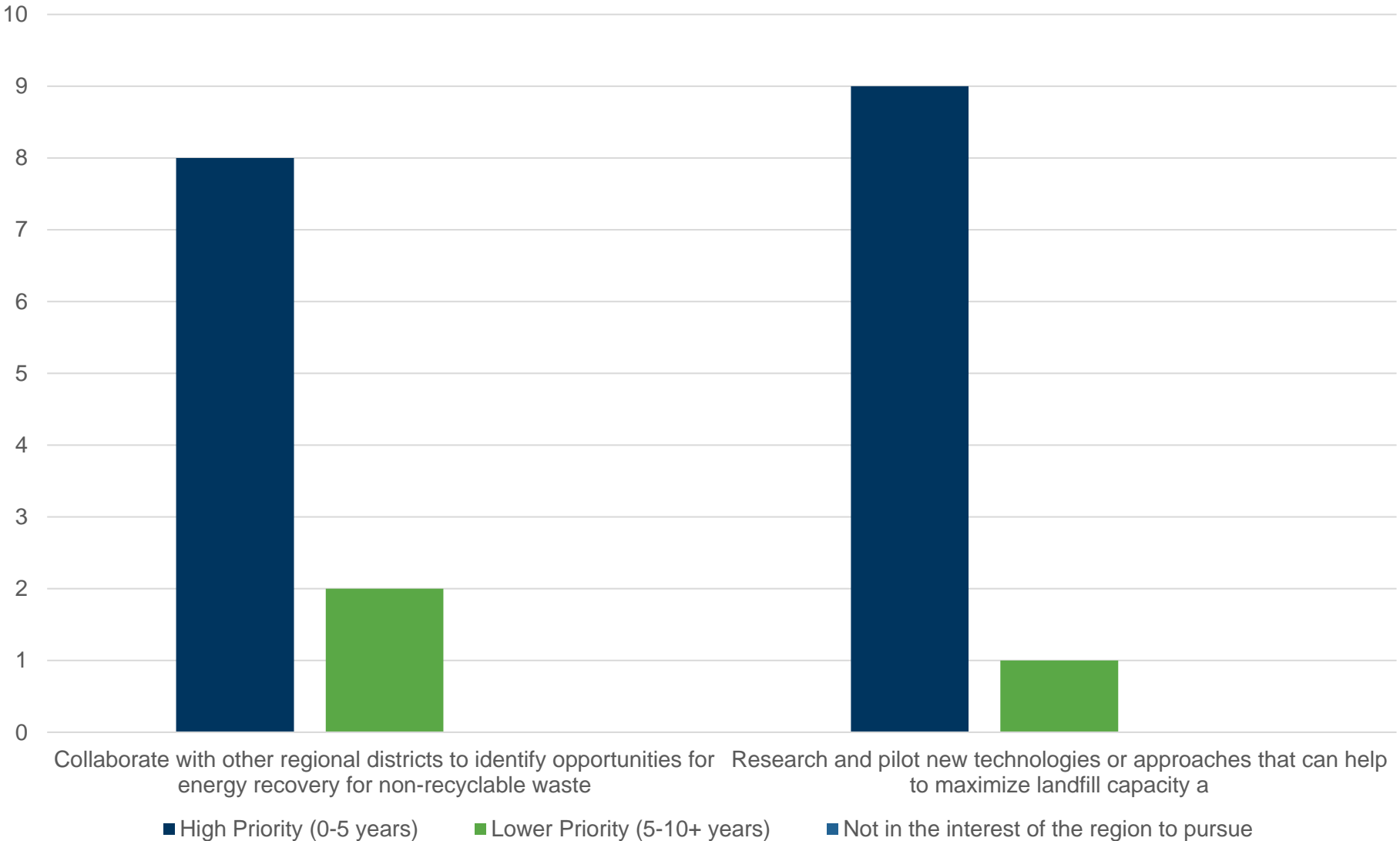
Prevent Illegal Dumping



Improve Wildlife Management



Review Innovative Technologies to Maximize Disposal Capacity and Reduce GHG Emissions



Questions/Feedback?





Overview of All Preferred Strategies Discussed to Date

Fourteen Preferred Strategies (#1 - 7)



Reduction,
Reuse,
Repair



1

Improve Waste Prevention

2

Improve Access to Three-Stream Curbside Collection

3

Improve Organics Processing and Diversion Capacity

4

Improve Education and Enforcement

5

Improve ICI Waste Diversion through Regulatory Requirements and Education

6

Improve C&D Waste Diversion

7

Continue to Subsidize Recycling Services in the CSRD where Appropriate



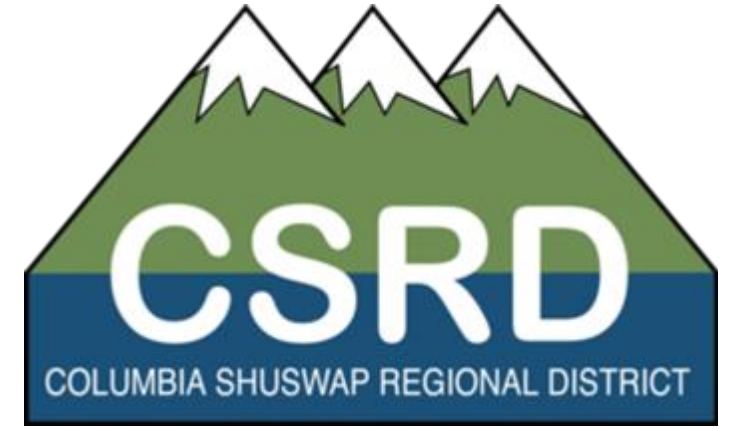
Recycling and
Organics
Diversion

Fourteen Preferred Strategies (#8 - 14)



- 8**) Improve Emergency Debris Management
- 9**) Prevent Wildlife Interactions
- 10**) Prevent Illegal Dumping
- 11**) Improve Transfer Station Network to Increase the Operational Efficiency and Level of Service to Users
- 12**) Review Innovative Technologies to Maximize Disposal Capacity and reduce GHG Emissions
- 13**) Regionalize the CSRD Landfills
- 14**) Cost Recovery, System Efficiency and Financial Sustainability





Reduction, Reuse, and Repair

Strategy 1

Why is Waste Prevention and Diversion Important?

- To shift thinking to waste as a resource
- To limit waste going to landfill
- To support the guiding principles

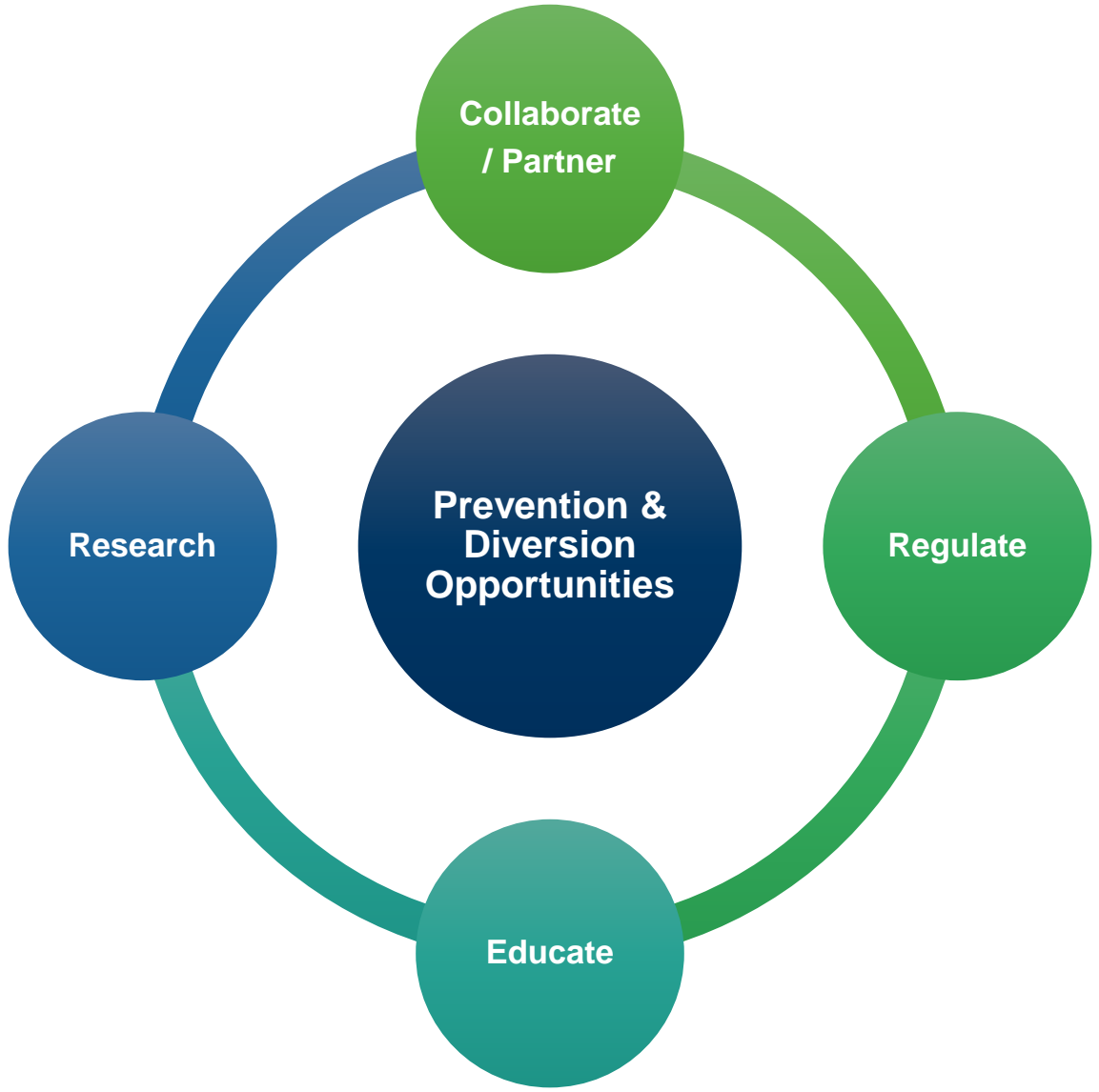
Average disposal per capita

BC: 499 kg in 2020

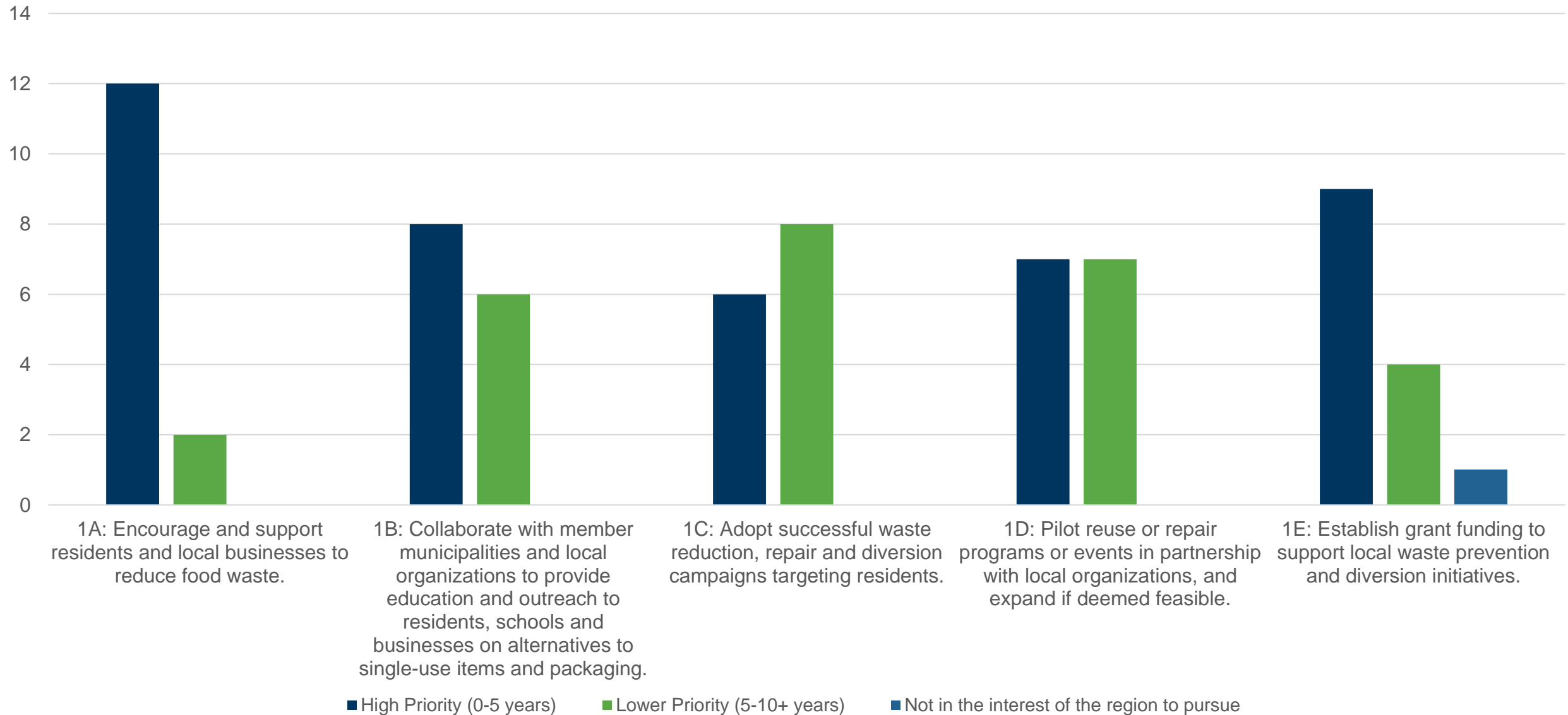
CSRD: 658 kg in 2021



Opportunities to Improve Waste Prevention & Diversion



PTAC Priorities – Strategy 1: Waste Reduction and Diversion



Strategy 1: Improve Waste Prevention



1A: Encourage and support residents and local businesses to reduce food waste.



1B: Establish grant funding to support local waste prevention and diversion initiatives.



1C: Collaborate with member municipalities and local organizations to provide education and outreach to residents, schools, and businesses on alternatives to single-use items and packaging.



1D: Pilot reuse or repair programs or events in partnership with local organization and expand if deemed feasible.



1E: Adopt successful waste reduction, repair and diversion campaigns targeting residents.

Strategy 1: Improve Waste Prevention



1A: Encourage and support residents and local businesses to reduce food waste.

Year 1-5

\$7,000
in year 2



1B: Establish grant funding to support local waste prevention and diversion initiatives.

Year 1-5

\$50,000
each year



1C: Collaborate with member municipalities and local organizations to provide education and outreach to residents, schools, and businesses on alternatives to single-use items and packaging.

Year 1-5

\$1,000
in year 2 & 3



1D: Undertake or support reuse or repair programs or events in partnership with local organization and expand if deemed feasible.

Year 1-10

\$5,000
in year 1, 3 & 6



1E: Adopt successful waste reduction, repair and diversion campaigns targeting residents.

Year 5-10

\$5,000
in year 4 and 5



Recycling and Organics Diversion

Strategies 2-7

Improve Access to Three-Stream Curbside Collection

- ~60% of the region's population has access to curbside collection
- Service levels differ between member municipalities
- CSRD does not operate curbside garbage or recycling collection programs



Strategy 2: Improve Access to Three-Stream Curbside Collection



2A: Provide better access to curbside recycling and organics collection in densely populated electoral areas, if deemed feasible.



2B: Support member municipalities to assess and implement three-stream curbside collection programs, if deemed feasible.

Strategy 2: Improve Access to Three-Stream Curbside Collection



2A: Support member municipalities to assess and implement three-stream curbside collection programs, if deemed feasible.

Year 1-5

\$10,000
in year 1, 2 & 3



2B: Implement three-stream curbside collection programs with priority on areas that meet Recycle BC's funding criteria.

Year 1-5

\$40,000
in year 2

Improve Organics Processing and Diversion Capacity



- Some communities still lack access to organics collection and composting facilities
- Potential for Golden to accept curbside organics and transfer it to the Revelstoke composting facility

Strategy 3: Improve Organics Processing and Diversion Capacity



3A: Partner with relevant municipalities and assess feasibility of organics processing solutions and implement if deemed feasible.



3B: Increase capacity of the Revelstoke composting facility.

Strategy 3: Improve Organics Processing and Diversion Capacity



3A: Partner with relevant municipalities and assess feasibility of organics processing solutions and implement if deemed feasible.

Year 1-5

\$20,000
in year 1



3B: Increase capacity of the Revelstoke composting facility.

Year 1-5

\$300,000
in year 1

Strategy 4: Improve Education and Enforcement

- Success of regulatory requirements needs:
 - effective education
 - enforcement
- CSRD currently lacks the staffing capacity for effective enforcement.



Strategy 4: Improve Education and Enforcement



4A: Partner with local, private service providers and organizations to provide better education on existing diversion opportunities and bylaws.



4B: Review contractor incentives for facilities operated by contractors to better encourage waste diversion.



4C: Increase CSRD enforcement capacity beyond current 2023 levels (e.g., staffing and equipment).








4D: Assess the cost-benefit of using contractor vs. in-house staff to operate CSRD facilities, and transition to in-house service if it is determined to be beneficial.



4E: Review options to simplify enforcement (e.g., clear bag requirement for landfill disposal, or use of AI technology), and implement if deemed feasible.

Strategy 4: Improve Education and Enforcement

	4A: Partner with local, private service providers and organizations to provide better education on existing diversion opportunities and bylaws.	Year 1-5	\$10,000 per year
	4B: Review contractor incentives for facilities operated by contractors to better encourage waste diversion.	Year 1-5	\$10,000 in year 2
	4C: Increase CSRD enforcement capacity beyond current 2023 levels.	Year 1-5	Pay for 1 full-time employee
	4D: Assess the cost-benefit of using contractor vs. in-house staff to operate CSRD facilities, and transition to in-house service if it is determined to be beneficial.	Year 1-10	\$30,000 in year 4
	4E: Review options to simplify enforcement (e.g., clear bag requirement for landfill disposal, or use of AI technology), and implement if deemed feasible.	Year 5-10	N/A

Improve ICI Waste Diversion Through Regulatory Requirements and Education

- The ICI sector contributes over half of the disposed waste
- ICI (non-residential) includes:
 - schools, hospitals, restaurants, businesses, hotels and campgrounds
 - construction and demolition waste
- 2023 waste composition data show that ICI sources can divert 57% of landfilled waste



Strategy 5: Improve ICI Waste Diversion through Regulatory Requirements and Education



5A: Review effectiveness of current regulations and assess suitability to amend current bylaws and/or implement additional regulatory requirements, including waste hauler licensing and mandatory waste sorting.



5B: Establish ICI specific grant funding to support ICI waste prevention and diversion.



5C: Create an ICI waste diversion working group for developing and dispersing resources and education.



5D: Promote certifications that are aimed at waste prevention and diversion.

Strategy 5: Improve ICI Waste Diversion through Regulatory Requirements and Education



5A: Review effectiveness of current regulations and assess suitability to amend current bylaws and/or implement additional regulatory requirements, including waste hauler licensing and mandatory waste sorting.

Year 5-10

\$30,000
in year 5



5B: Establish ICI specific grant funding to support ICI waste prevention and diversion.

Year 1-10

\$10,000
per year



5C: Create an ICI waste diversion working group for developing and dispersing resources and education.

Year 5-10

N/A



5D: Promote certifications that are aimed at waste prevention and diversion.

Year 5-10

N/A

Improve C&D Waste Diversion

- CSRD's differential tipping fee bylaw
- Construction and Demolition Waste Reduction Program and Toolkit
- C&D of buildings is regulated by the CSRD or by the member municipalities

CONSTRUCTION AND DEMOLITION WASTE REDUCTION PROGRAM AND TOOLKIT

COLUMBIA SHUSWAP
REGIONAL DISTRICT



Strategy 6: Improve C&D Waste Diversion



6A: Collaborate with member municipalities to conduct a feasibility study to determine what C&D regulatory approaches are best suited in the region and implement the most suitable ones.



6B: Support successful C&D waste diversion campaigns and initiatives targeting local demolition business and residents.



6C: Pilot C&D waste material separation to sort mixed C&D materials and divert them from landfilling through a third-party or the CSRD.



6D: Develop a C&D working group for developing and dispersing resources, education, and developing new resources.

Strategy 6: Improve C&D Waste Diversion



6A: Collaborate with member municipalities to conduct a feasibility study to determine what C&D regulatory approaches are best suited in the region and implement the most suitable ones.

Year 1-5

\$30,000
in year 4



6B: Implement successful C&D waste diversion campaigns and initiatives targeting local demolition business and residents.

Year 1-5

\$1,000
per year



6C: Pilot C&D waste material separation to sort mixed C&D materials and divert them from landfilling through a third-party or the CSRD.

Year 1-5

\$100,000
in year 3



6D: Develop a C&D working group for developing and dispersing resources, education, and developing new resources.

Year 5-10

N/A

Continue to Subsidize Recycling Services in the CSRD where Appropriate

- The cost to recycle and haul materials regulated under EPR exceeds revenue and funds from EPR
- CSRD is a member of the BC Product Stewardship Council
- CSRD offers recycling options beyond materials covered by EPR



Strategy 7: Continue to Subsidize Recycling Services in the CSRD where Appropriate



7A: Continue to support recycling depots through subsidies.



7B: Continue to offer current or improved recycling services at CSRD facilities, where appropriate.



7C: Advocate for increased stewardship support to improve accessibility to recycling and cover recycling costs.

Strategy 7: Continue to Subsidize Recycling Services in the CSRD where Appropriate



7A: Continue to support recycling depots through subsidies.

Year 1-10

\$200,000
per year



7B: Continue to offer current or improved recycling services at CSRD facilities, where appropriate.

Year 1-10

N/A



7C: Advocate for increased stewardship support to improve accessibility to recycling and cover recycling costs.

Year 1-10

N/A



Residual Waste Management Strategies 8-13

Improve Emergency Debris Management

- Extreme weather events are becoming more frequent and severe
- Need to develop a debris management plan to manage unpredictable surges in waste



Ministry of
Environment and
Climate Change Strategy

2021 BC Floods Response

DEBRIS WASTE MANAGEMENT GUIDANCE



Strategy 8: Improve Emergency Debris Management



8A: Develop a debris waste management plan and emergency response plans for CSRD facilities to manage unpredictable surges in waste materials from natural disasters.

Strategy 8: Improve Emergency Debris Management



8A: Develop a debris waste management plan and emergency response plans for CSRD facilities to manage unpredictable surges in waste materials from natural disasters.

Year 1-5

\$50,000
in year 1

Prevent Wildlife Interactions

- Overall management of wildlife is responsibility of province and Conservation Officer Service
- Some municipal bylaws have specifications for waste collection to reduce wildlife interaction
- CSRD has collaborated with WildSafe BC to provide education to the community



British Columbia Conservation Foundation

Strategy 9: Prevent Wildlife Interactions



9A: Develop an education campaign, including info sessions for residents, around improving wildlife management



9B: Revise suitable waste-related bylaws to integrate requirements around wildlife attractants.

Strategy 9: Prevent Wildlife Interactions



9A: Develop an education campaign, including info sessions for residents, around improving wildlife management

Year 1-5

\$1,000
per year



9B: Work with member municipalities to incorporate requirements around wildlife attractants in collection bylaws.

Year 5-10

N/A

Prevent Illegal Dumping

- Currently directing users to “Report a Poacher and Polluter (RAPP)” line.
- There is a lack of resources to police illegal dumping, even though the CSRD can impose fines
- The CSRD works with volunteer organizations to clean up problem sites annually



Image from the Salmon Arm Observer

Strategy 10: Prevent Illegal Dumping



10A: Establish an illegal dumping task force and develop an illegal dumping strategy aimed to improve tracking and reduce the number of illegal dumping incidents.

Strategy 10: Prevent Illegal Dumping



10A: Establish an illegal dumping task force and develop an illegal dumping strategy aimed to improve tracking and reduce the number of illegal dumping incidents.

Year 5-10

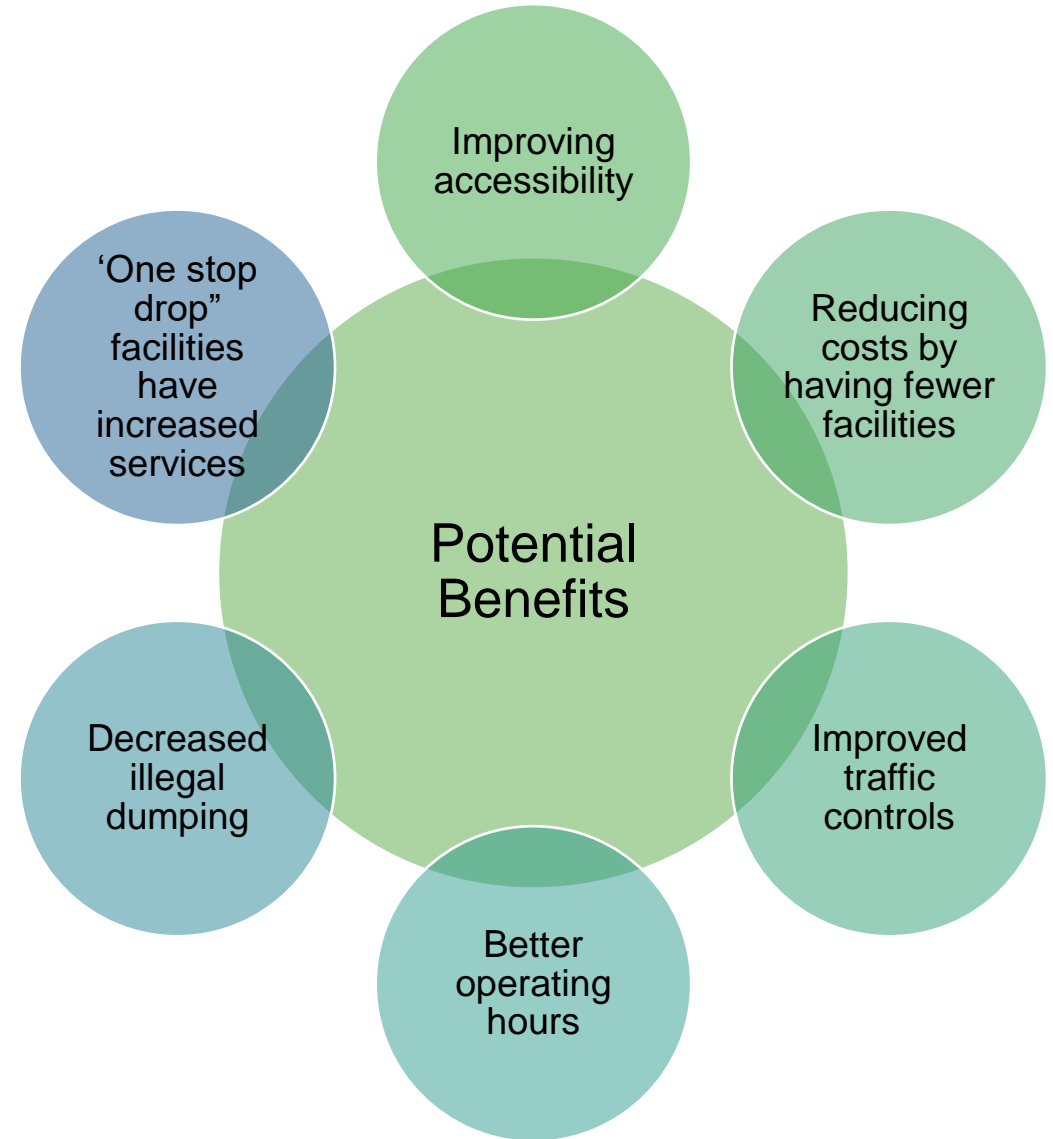
N/A

- CSRD facilities
 - 8 transfer stations
 - 4 landfills

Improve Transfer Station Network to Increase the Operational Efficiency and Level of Service to Users

Public feedback:

- Higher levels of services
 - Acceptance of a wider range of materials (composting, recycling)
 - Improved operational hours
 - Increase in facility capacity: Scotch Creek and Skimikin
- Better signage at facilities



Strategy 11: Improve Transfer Station Network to Increase the Operational Efficiency and Level of Service to Users



11A: Assess user demands at all facilities and increase operational hours at selected sites to improve access and meet seasonal demands.



11B: Conduct a transfer station assessment with siting and design options for sites that justify being amalgamated into centralized upgraded transfer station facilities.

Strategy 11: Improve Transfer Station Network to Increase the Operational Efficiency and Level of Service to Users



11A: Assess user demands at all facilities and increase operational hours at selected sites to improve access and meet seasonal demands.

Year 1-5

\$50,000
per year



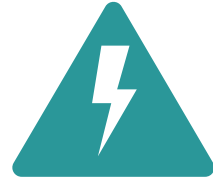
11B: Conduct a transfer station assessment with siting and design options for sites that justify being amalgamated into centralized upgraded transfer station facilities.

Year 1-5

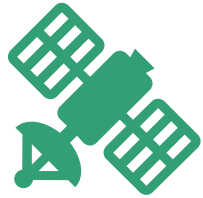
\$100,000
in year 2

Review Innovative Technologies to Maximize Disposal Capacity and Reduce GHG Emissions

Considerations:



There is currently no suitable proven waste-to-energy technology for the CSRD's size



Opportunity to maximize landfill capacity:

- GPS to track and compact waste
- waste shredding to increase compaction



Opportunity to consider innovative landfill gas collection / co-generation opportunities

Strategy 12: Review Innovative Technologies to Maximize Disposal Capacity and Reduce GHG Emissions



12A: Collaborate with other regional districts to identify opportunities for energy recovery for non-recyclable materials, such as wood waste.



12B: Research and pilot new technologies or approaches that can help to maximize landfill capacity and GHG emissions from landfills.

Strategy 12: Review Innovative Technologies to Maximize Disposal Capacity and Reduce GHG Emissions



12A: Collaborate with other regional districts to identify opportunities for energy recovery for non-recyclable materials, such as wood waste.

Year 1-5

\$15,000
in year 5



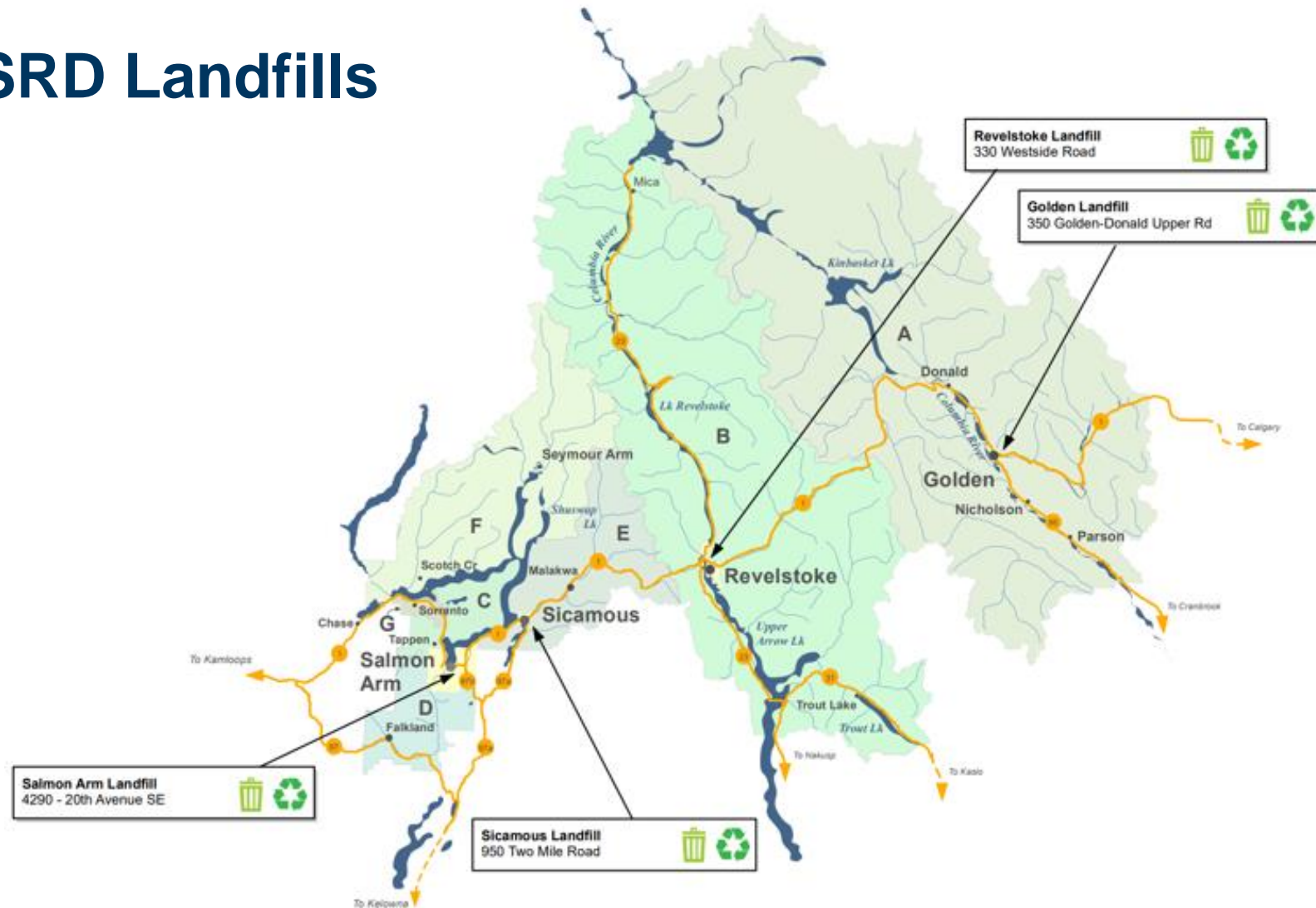
12B: Research and pilot new technologies or approaches that can help to maximize landfill capacity and GHG emissions from landfills.

Year 1-5

N/A

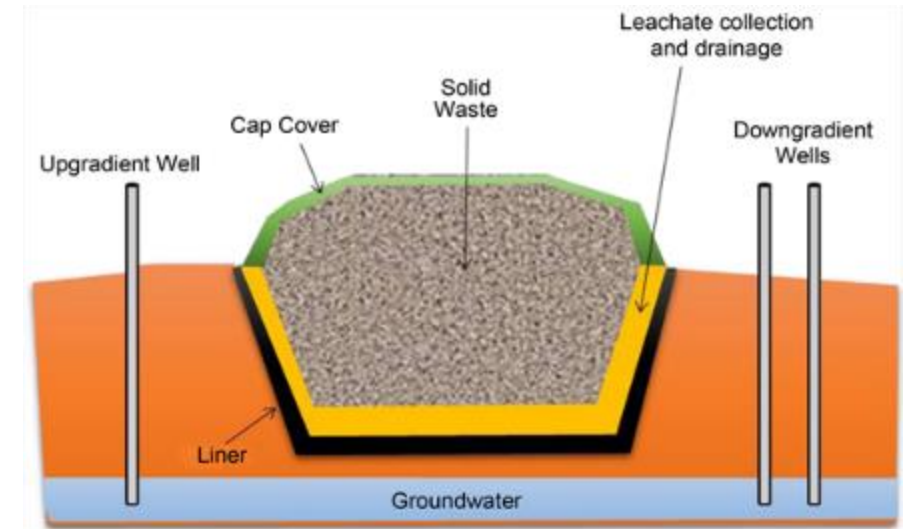
Regionalize the CSRD Landfills

The CSRD Landfills



Strategy 13: Regionalize the CSRD Landfills

- All four CSRD landfills are natural attenuation landfills
- Only Phase 2 of Salmon Arm Landfill is engineered
- Ongoing compliance issues at the landfills
- Significant cost increases through fines, costs to address compliance, or upgrades
- Three of the four landfills will need major capital upgrades



[This Photo](#) from [CC BY](#)

Next Steps to Determine Future of CSRD's Landfills

- DOCPs for Golden and Revelstoke Landfills are being updated
- Sicamous DOCP is completed
- DOCPs will help inform long-term landfill options and costs
- Need to consider impacts from landfill closures on other regional landfills



Strategy 13: Regionalize the CSRD Landfills



13A: Continue to collaborate with the MoE to find solutions for compliance issues related to natural attenuation landfills.



13B: Continue to lobby the MoE to standardize requirements on landfills in BC (e.g., litter control).



13C: TBC (long-term options)

Strategy 13: Regionalize the CSRD Landfills



13A: Continue to collaborate with the MoE to find solutions for compliance issues related to natural attenuation landfills.

Year 1-5

N/A



13B: Continue to lobby the MoE to standardize requirements on landfills in BC (e.g., litter control).

Year 1-5

N/A



13C: To be confirmed

?

?



Cost Recovery, System Efficiency and Financial Sustainability

Strategy 14

Strategy 14: Cost Recovery, System Efficiency and Financial Sustainability



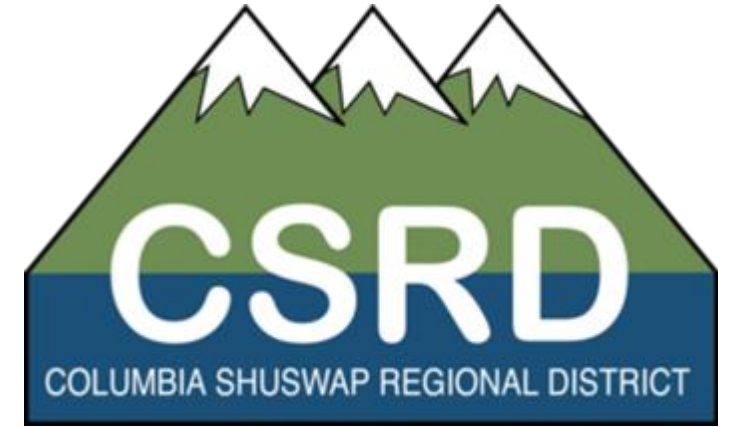
14A: To be confirmed.



14B: To be confirmed.

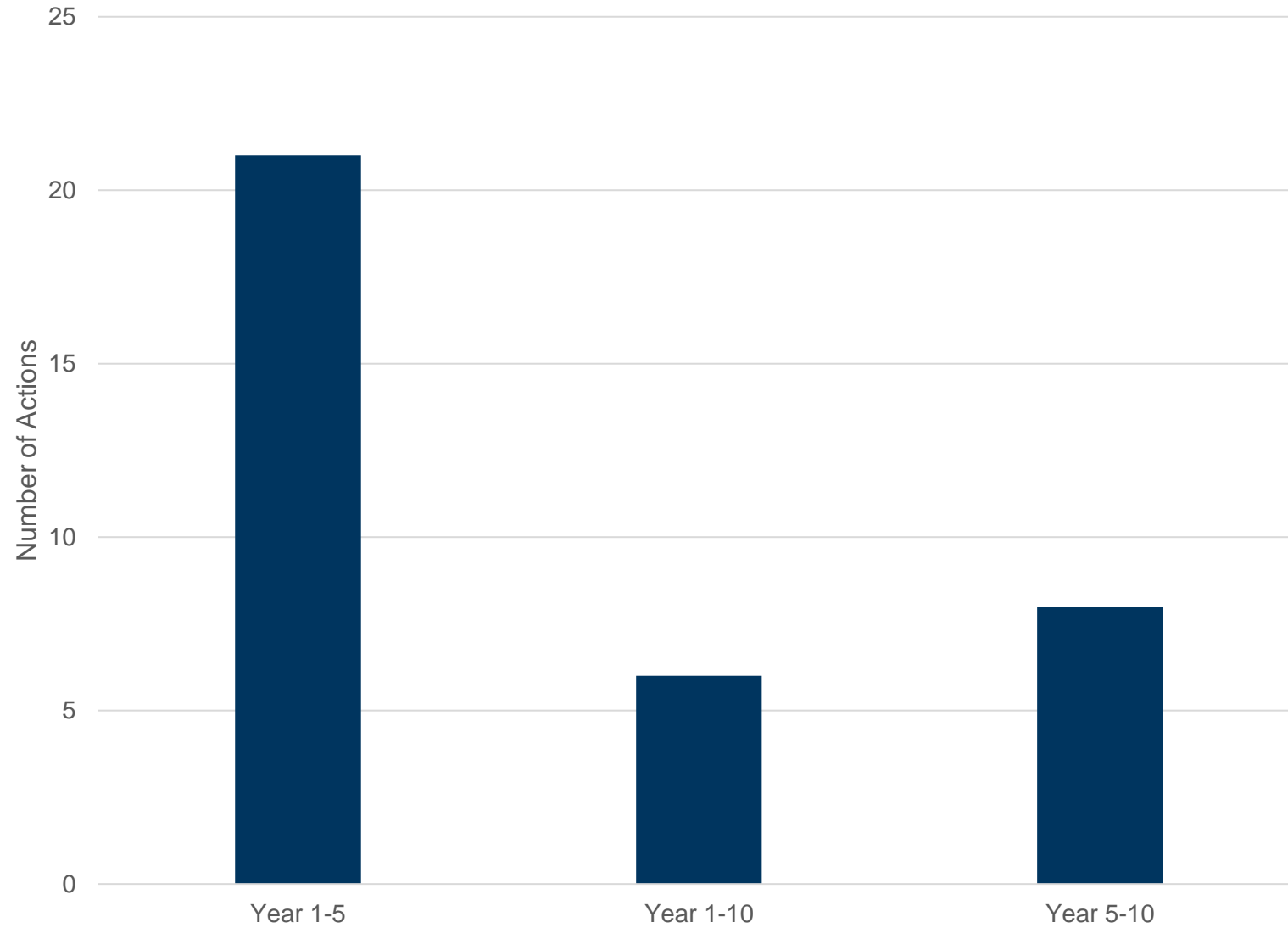


Break – 15 minutes



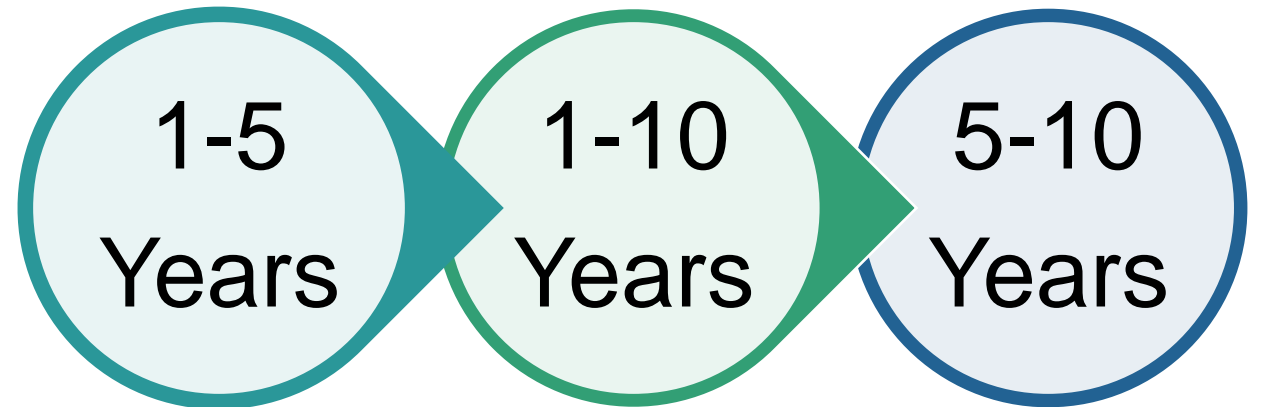
Discussion on CSRD's Priorities

Discussion on CSRD's Priorities



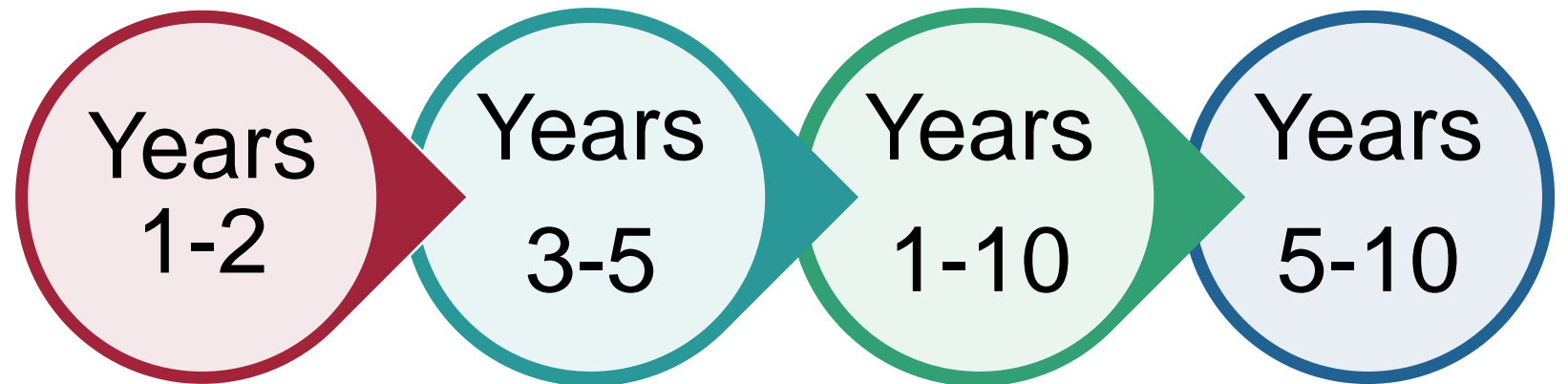
Activity

- With your group:
 - Look at what actions are under each of the 3 implementation periods
 - Assess the priority and consider if any actions can be moved to distribute actions more evenly
 - The actions are colour coded for each strategy



Activity

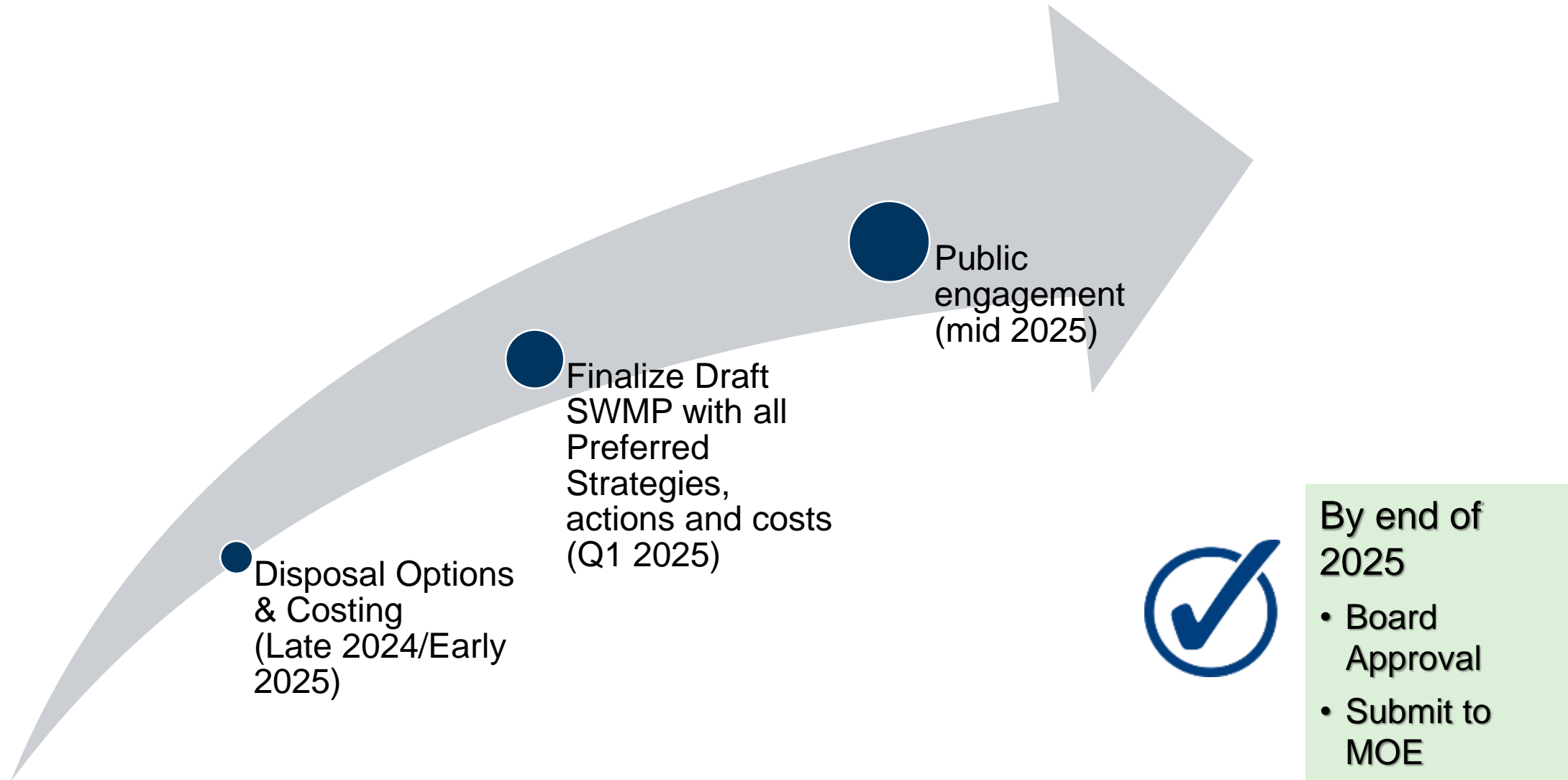
- Together:
 - Looking at the actions you have placed in years 1-5, what actions are most important and should be focused on in years 1 and 2?





Next Steps

Next Steps – Future PTAC Meetings



Questions/Feedback?

After Meeting:
Share any additional feedback via
link provided



Thank you!

Veronica Bartlett
Senior Solid Waste Planner
veronica.bartlett@stantec.com

Alex Velsink
Solid Waste Planner
alex.Velsink@stantec.com

