

Virginia Initiative Plant (VIP) Industry Outreach Virtual Meeting

April 25, 2023



Participation Tips

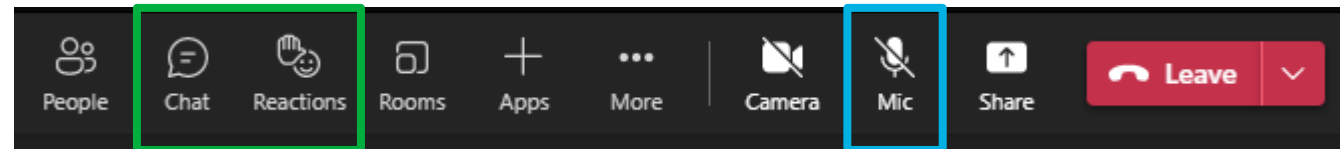
Participation Tips

- If your connection to the meeting freezes, please exit and re-enter the meeting to refresh your connection
- Please remain on mute throughout the presentation
- You may listen through your computer speakers or the Teams app on your mobile phone
- Please type questions into the chat or raise your hand to be called on when we get to the Q&A period



For additional information, please visit
<http://www.swiftva.com>

Virtual Meeting Logistics – Teams



Use **CHAT** or **RAISE HAND** to provide additional thoughts

MUTE when not talking to limit background noise



Presentation Agenda

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SWIFT Overview

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Project Scopes and
Proposed Delivery

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Proposed Request for Proposals

5

Feedback Opportunities

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Question & Answer



SWIFT Overview

Lauren Zuravnsky, PE
Chief of Design & Construction – SWIFT
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Before HRSD was created in 1940, raw sewage was discharged to open area waterways and ditches.



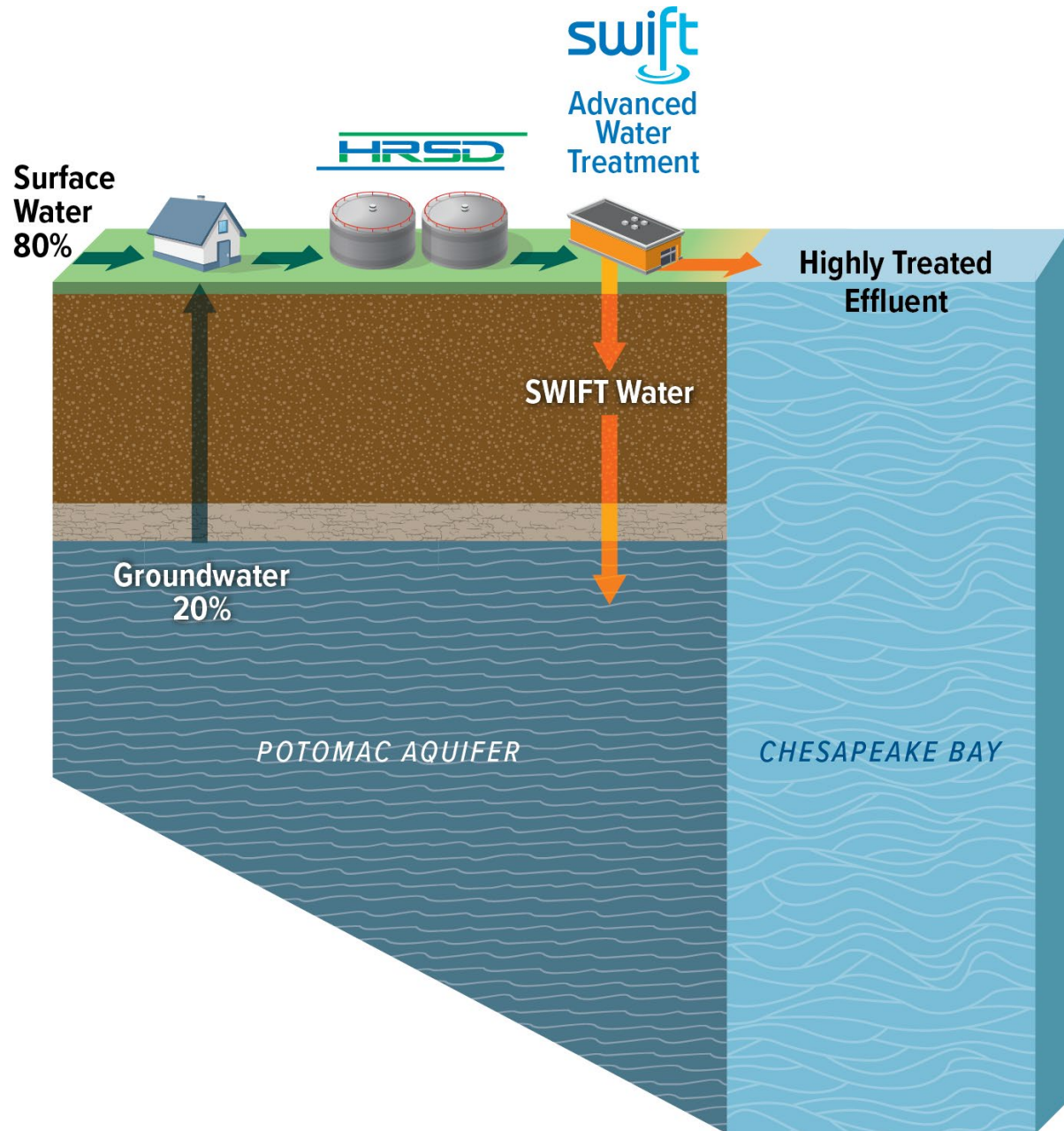
Our Vision

Our communities will have clean waterways and reliable water resources for generations to come.



Our Promise

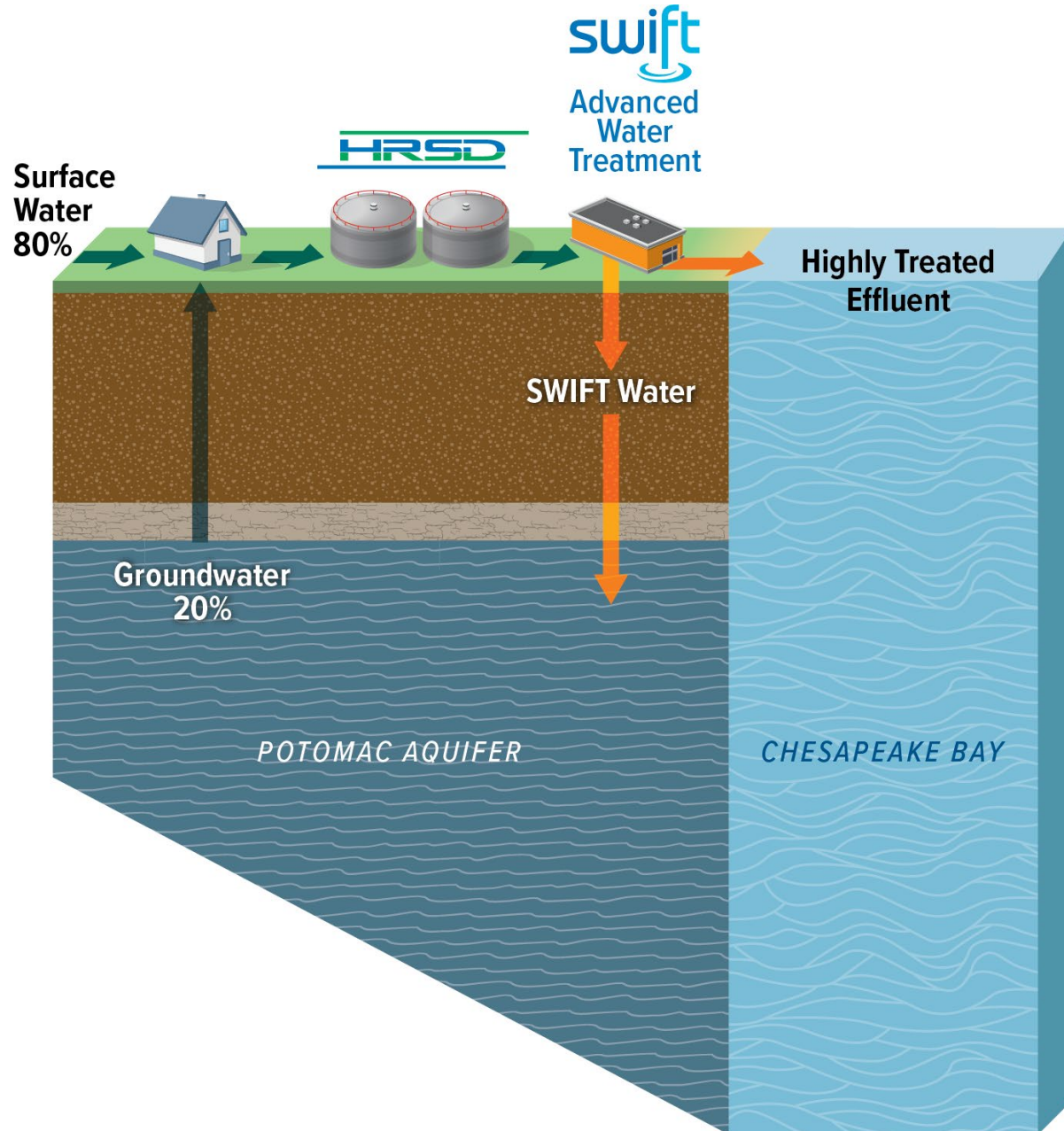
We promise to treat wastewater and recover natural resources to protect public health and the environment.



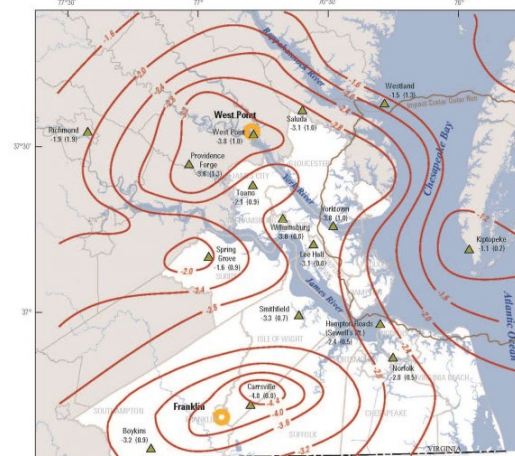
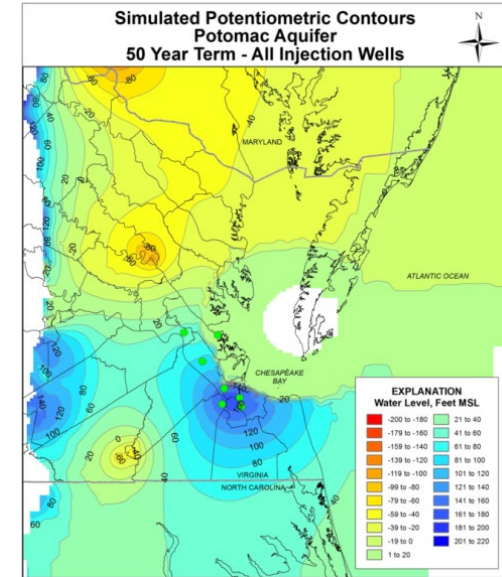
SWIFT

Sustainable Water Initiative for Tomorrow

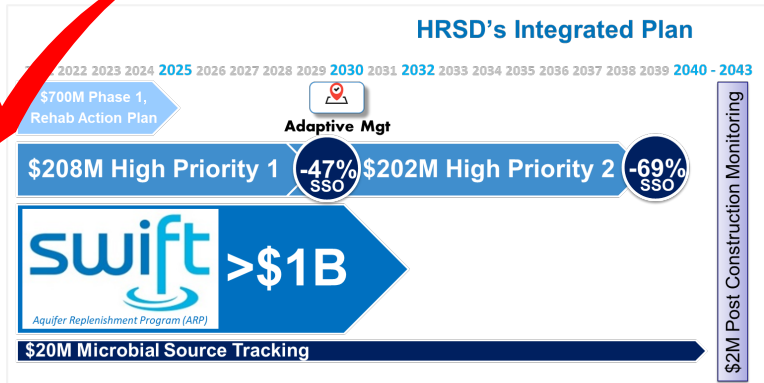
Multiple regional benefits of SWIFT



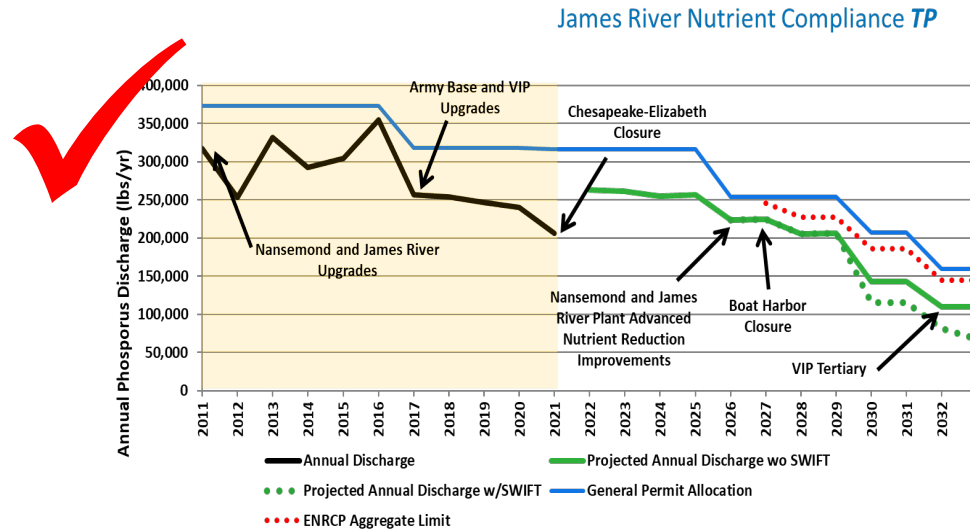
SWIFT has the potential to address **multiple environmental and economic challenges** for the region, related to over-withdrawal from the Potomac Aquifer.



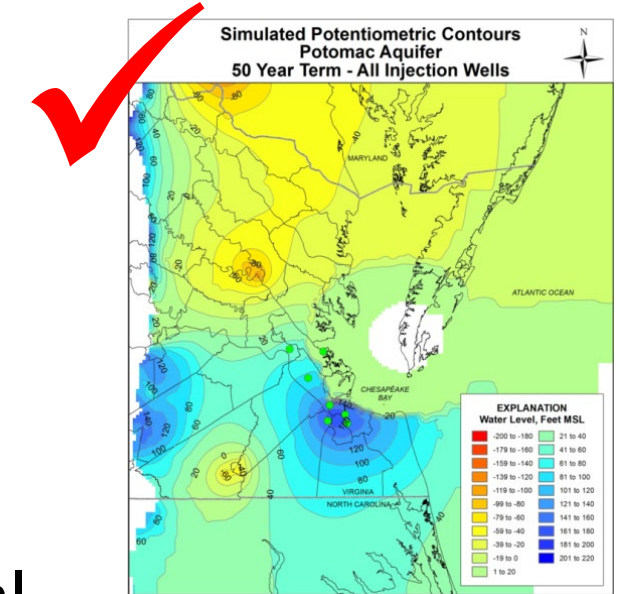
Initial phase of SWIFT implementation will meet HRSD's regulatory requirements



Integrated Plan

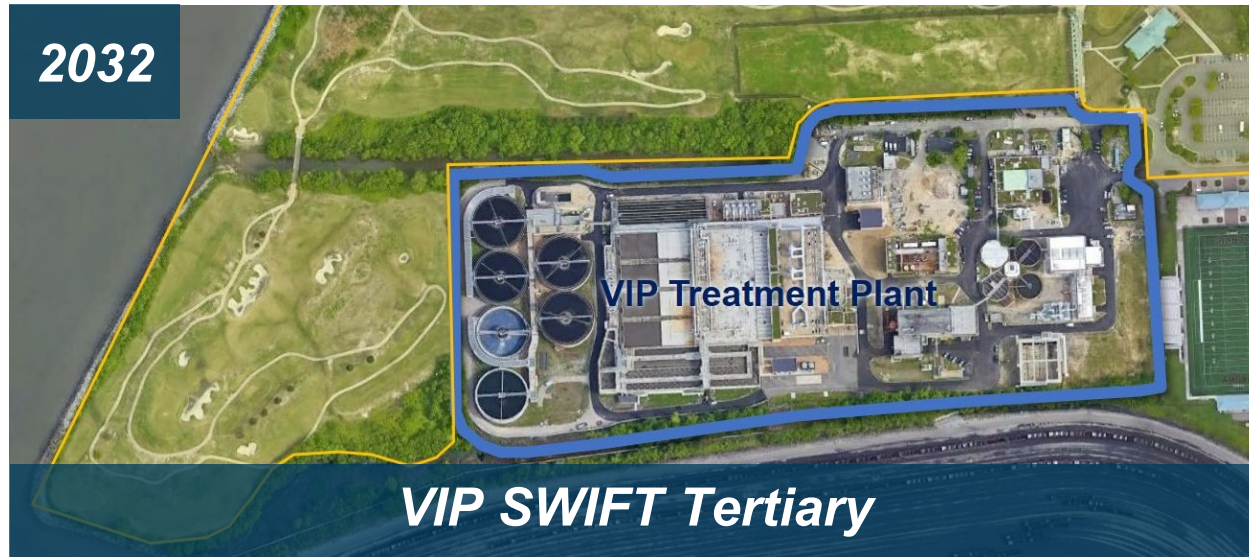


Enhanced Nutrient Removal
 Certainty Program
Total Nitrogen
Total Phosphorus



Aquifer
 Recharge

Initial phase of SWIFT Implementation will be complete by 2032 to meet ENRCP and IP goals





VIP Overview

Akshay Kumar, PE, Assoc. DBIA
HRSD Project Manager – VIP
akumar.ctr@hrsd.com

Open channels for conversation

Today's Purpose

Share latest thoughts, concepts and **expectations** for implementing SWIFT Tertiary at VIP, **engage** potential partners and elicit industry **feedback**



Reach out to Akshay to learn more.
Akshay Kumar, PE, Assoc. DBIA
HRSD Project Manager – VIP
Akumar.ctr@hrsd.com



How to stay connected



Complete
Survey



Follow-up
via Email

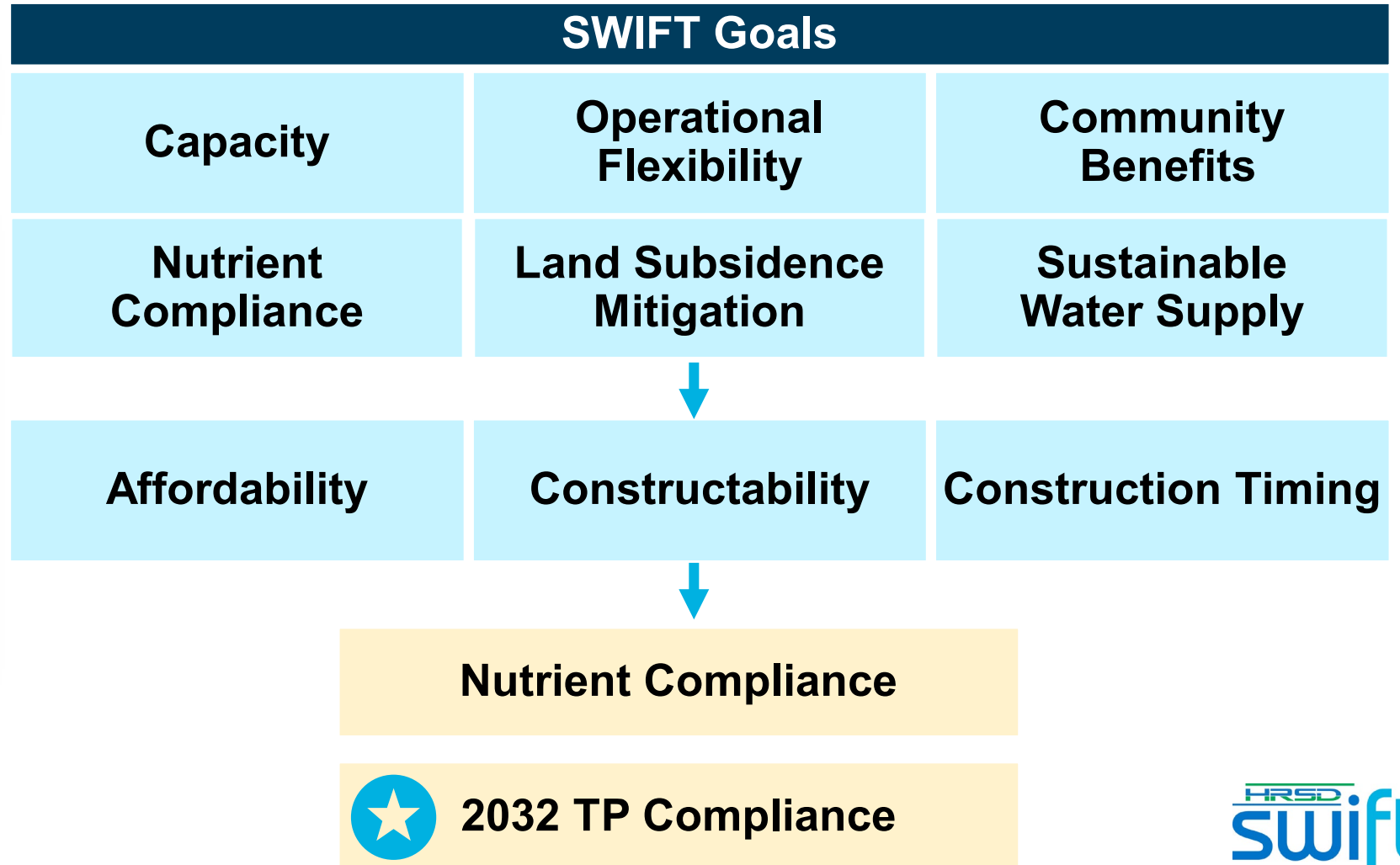


Schedule Meeting
(In-Person or
Virtual)

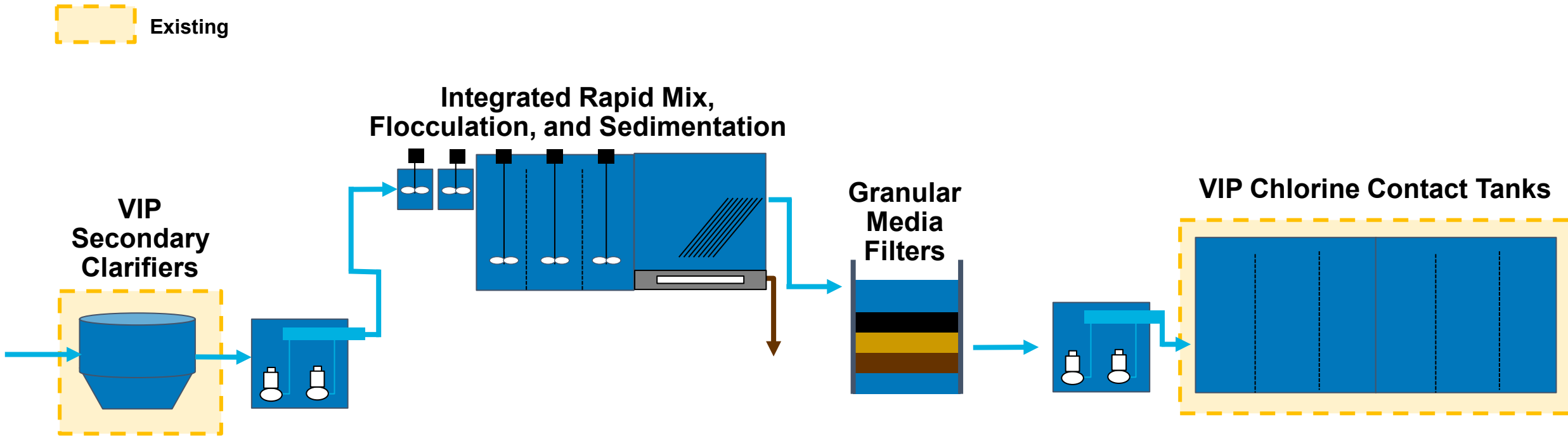
How does VIP align with the overall goal of SWIFT?

SWIFT Overview

SWIFT Drivers
balanced with
compliance
requirements to
adapt to current
market conditions



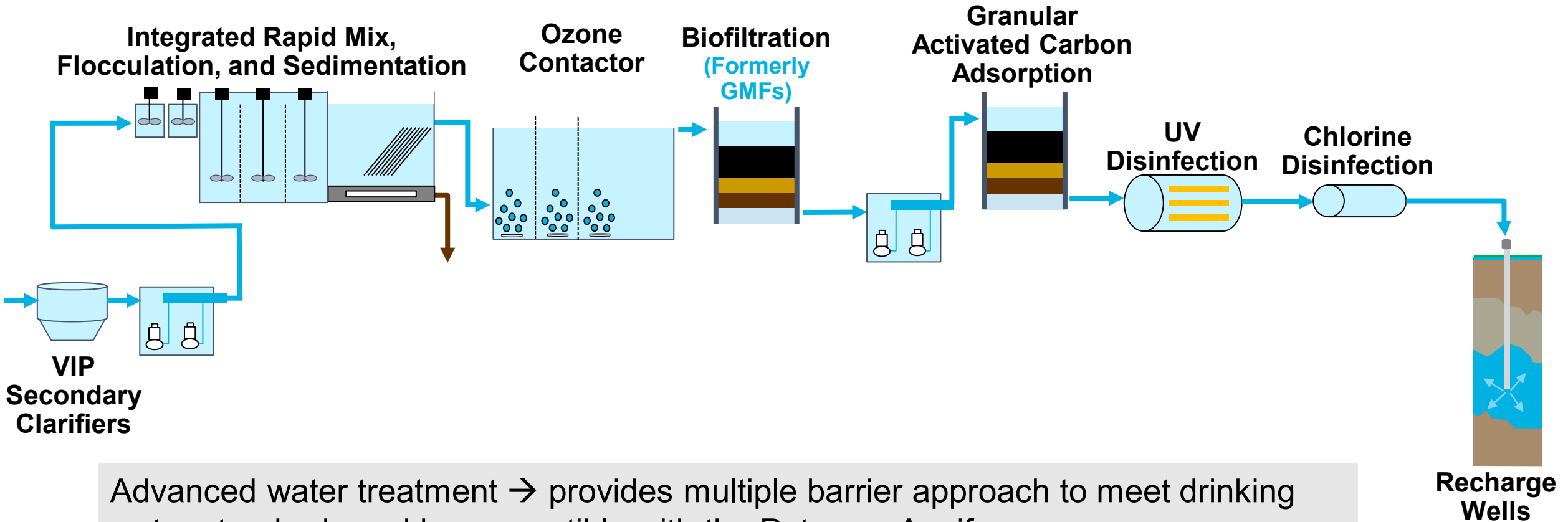
Initial SWIFT Implementation at VIP will focus on nutrient compliance through SWIFT Tertiary



- Expected Effluent Phosphorus Concentration Target ≤ 0.1 mg/L
- Plan for future SWIFT Advanced Water Treatment (AWT)

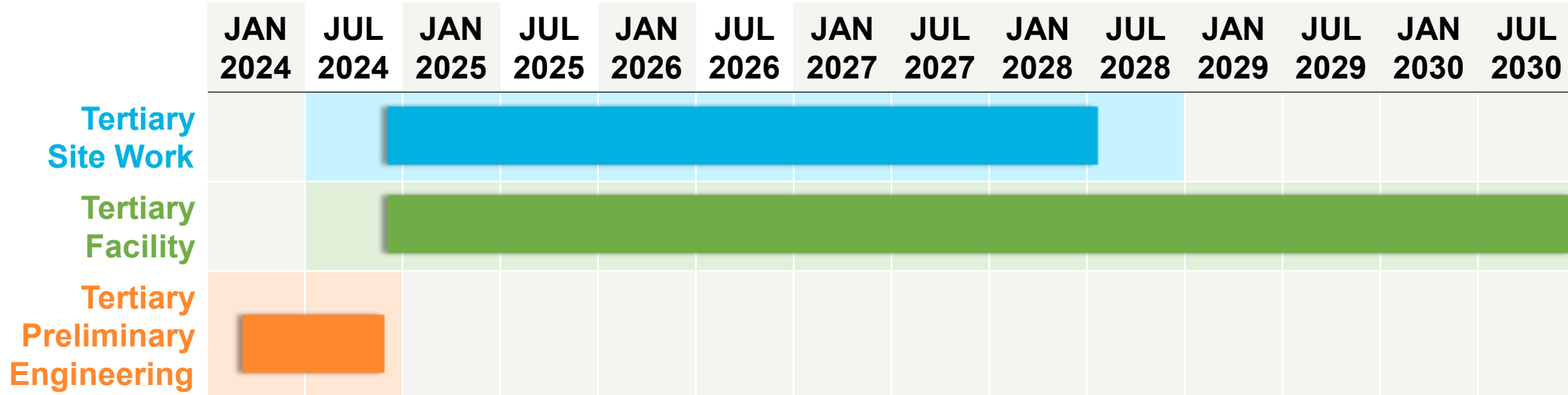
SWIFT Tertiary Planning will need to consider future SWIFT AWT implementation

SWIFT Tertiary → SWIFT AWT



Advanced water treatment → provides multiple barrier approach to meet drinking water standards and be compatible with the Potomac Aquifer

Professional services team will manage multiple, integrated projects



GN016391
VIP SWIFT
Tertiary Site Work

GN016392
VIP SWIFT
Tertiary Facility

GN016390
VIP SWIFT Tertiary Preliminary Engineering
To perform landfill site investigation, evaluation of preliminary concepts for site development and SWIFT Tertiary treatment, finalize design and project delivery approach, plan for SWIFT AWT

Former landfill and golf course site will be the location of the future treatment facilities

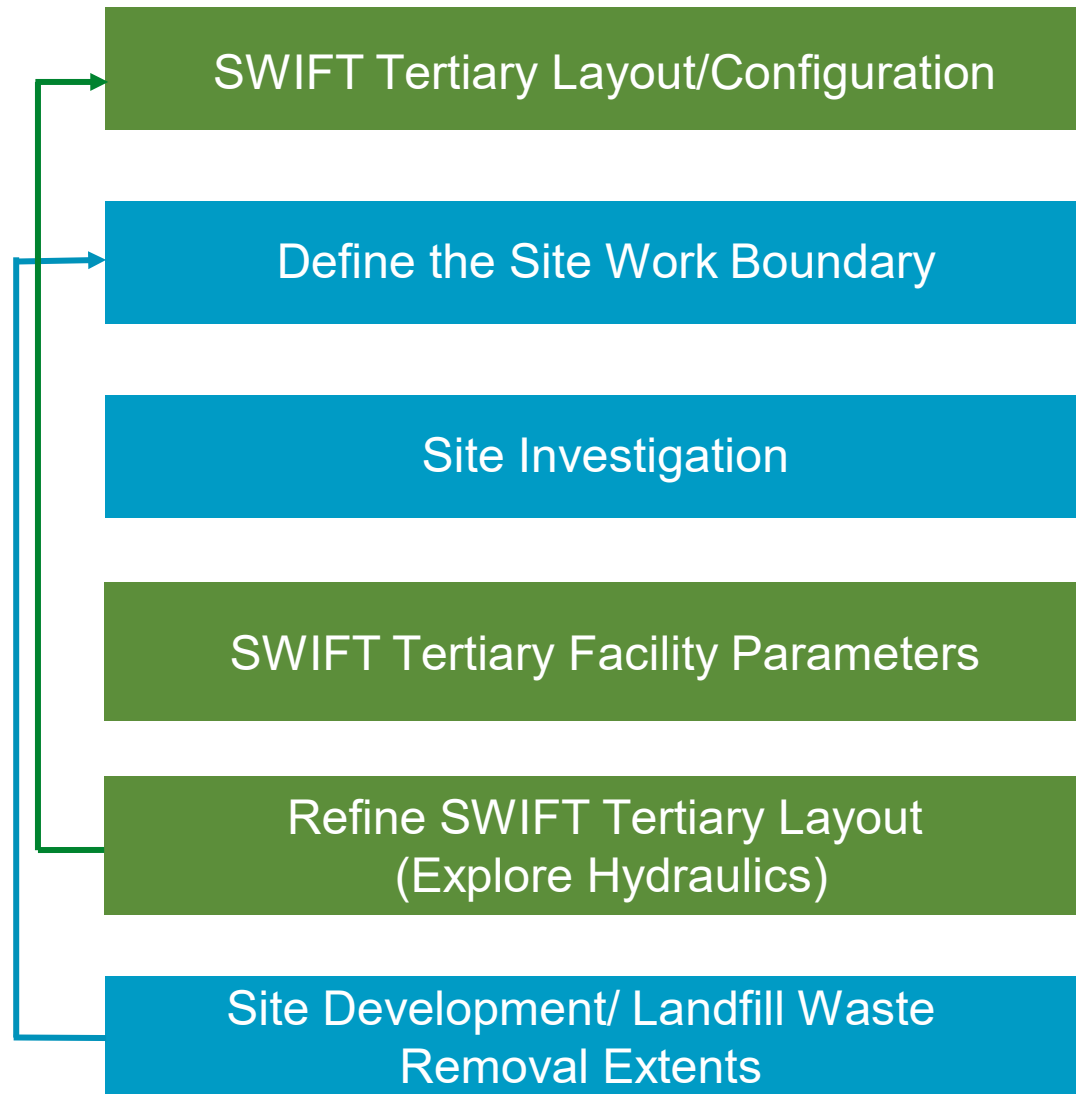


A photograph of an industrial facility, likely a water treatment plant, featuring large grey pipes, a prominent blue handwheel valve, and a complex network of steel beams and walkways under a clear blue sky.

Project Scopes and Proposed Delivery

Akshay Kumar, PE, Assoc. DBIA
HRSD Project Manager – VIP
akumar.ctr@hrsd.com

Professional services team will deliver an integrated PER to determine the approach for subsequent phases



GN016391
VIP SWIFT
Tertiary Site Work

GN016392
VIP SWIFT
Tertiary Facility



Project challenges, desired outcomes have formed our expectations for the proposing teams' skill sets



- Risk-based site investigation
- Optimizing SWIFT Tertiary hydraulics to minimize landfill excavation
- Considering future SWIFT AWT into SWIFT Tertiary planning



- SWIFT Tertiary design to meet low effluent TP regulations
- Expert in plant hydraulics
- SWIFT AWT design
- Supporting development of regulatory strategy and work plans
- Experience working with VDEQ for early engagement in the site investigation process

Expected project delivery methods include Design-Bid-Build and Construction Manager at Risk

Delivery Method Determinants

Risk allocation



Costs certainty



Early contractor involvement



Risks from unknowns – landfill



Early understanding of costs



Timing of landfill waste characterization



The background of the slide is a photograph of an industrial facility, likely a power plant or manufacturing plant. It shows a complex network of pipes, valves, and large machinery. The lighting is somewhat dim, with some overhead lights visible. The overall color palette is dominated by greys, blues, and metallic tones. The text is overlaid on this image.

Proposed Request for Proposals

Akshay Kumar, PE, Assoc. DBIA

HRSD Project Manager – VIP

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An integrated team to deliver both projects

ONE CONTRACT.

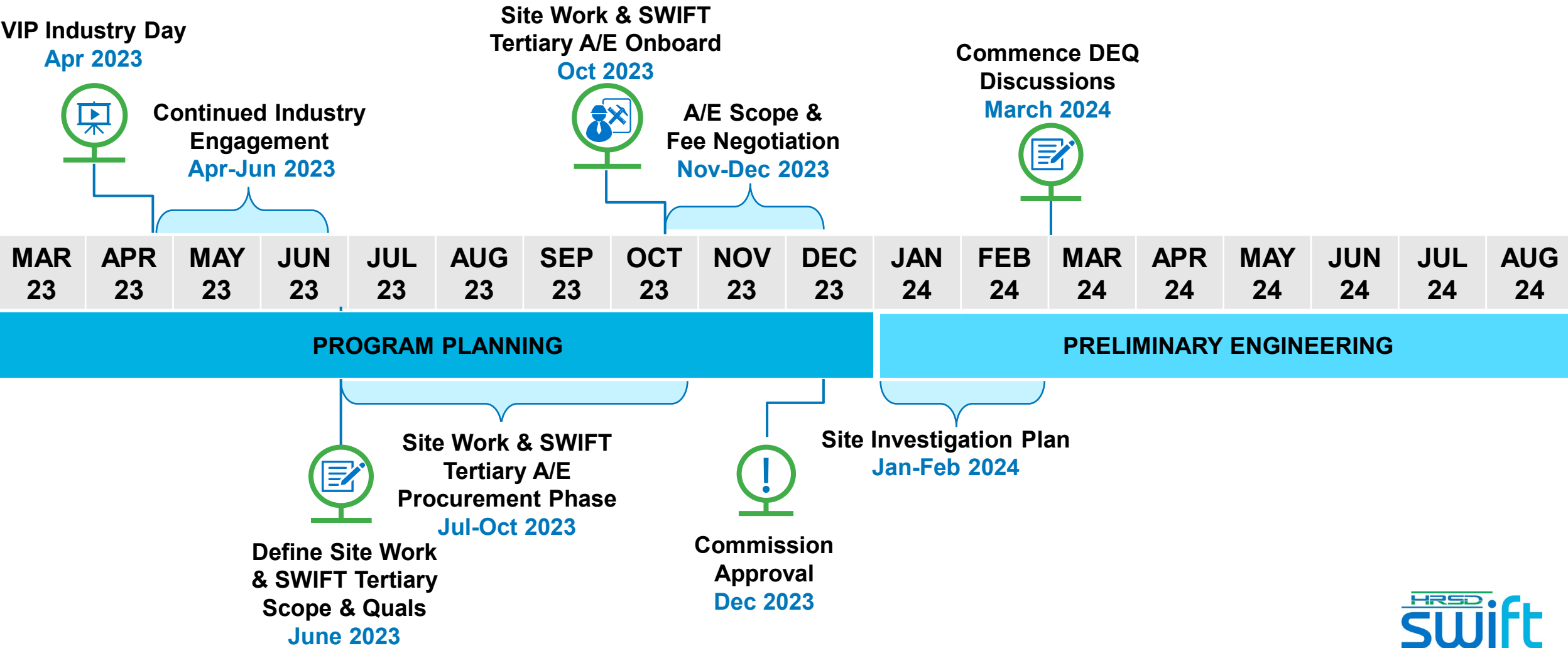
ONE TEAM.

- Procure one contract with the qualifications and capability to deliver both projects
- One request for proposal (RFP) to hire one team
- Selected team could comprise one or more firms that collectively perform the work as a team

**NOW IS THE TIME TO PROVIDE
FEEDBACK FOR THE UPCOMING
OPPORTUNITIES AT VIP**



Proposed request for proposals – project timeline





Feedback Opportunities

Akshay Kumar, PE, Assoc. DBIA

HRSD Project Manager – VIP

akumar.ctr@hrsd.com

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How to stay connected



Complete
Survey

**Please complete by
Friday 4/28**



Follow-up
via Email



Schedule Meeting
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Virtual)

A close-up photograph of a water faucet dripping into a blue bowl. The water is captured in mid-air, creating a series of small droplets and splashes. The background is a soft, out-of-focus blue.

Questions and Answers

Akshay Kumar, PE, Assoc. DBIA

HRSD Project Manager – VIP

akumar.ctr@hrsd.com

How to submit a question

ORAL QUESTIONS



1. Click the **Reactions** icon to be placed in the comment queue
2. When called upon, come off mute and state your name and affiliation, if desired
3. State your question, then mute your microphone and lower your hand by clicking Raise Hand again

WRITTEN QUESTIONS



1. Click the **Q&A** button to enter a written comment
2. Include your name and affiliation with your written comment, if desired
3. The Facilitator will read off the question and the team will then provide the appropriate response



Sustainable
Water Initiative
for Tomorrow



Industry Outreach

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<http://www.swiftva.com>

