

Webinar  
October 4, 2022  
11:00 – 12:00PM ET

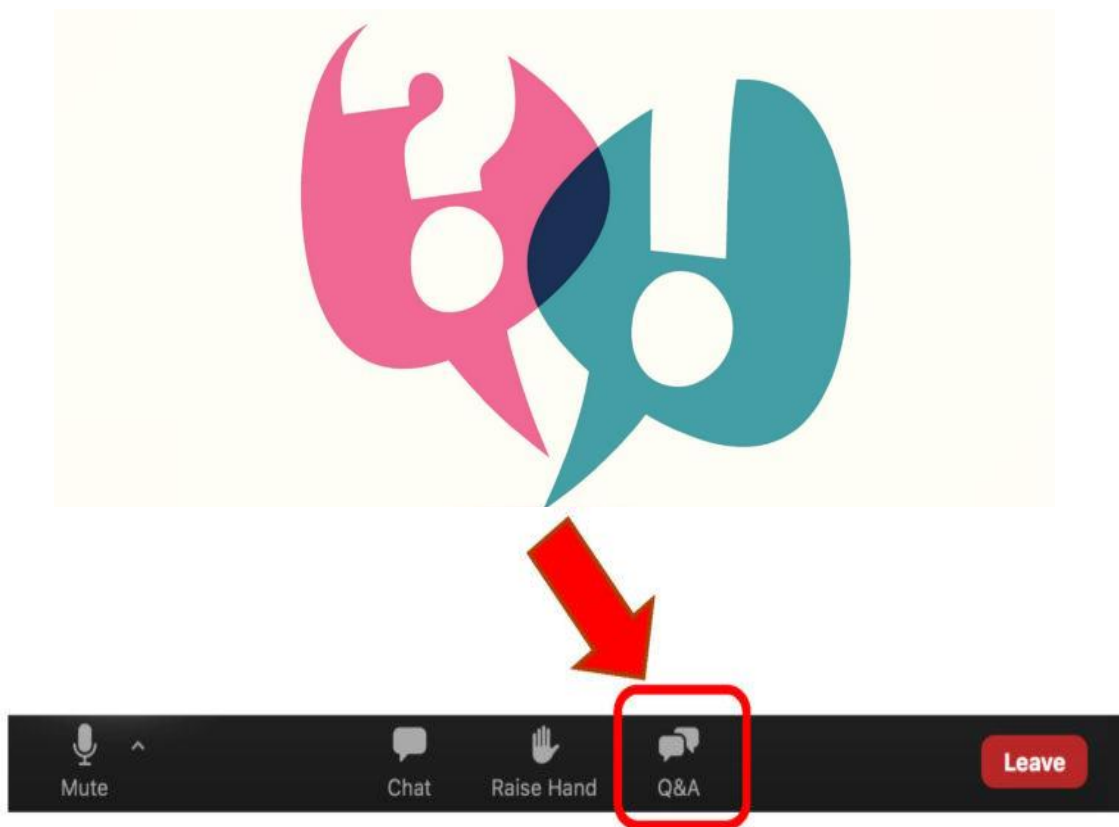
# SP Water Stewardship Action Matrix



[supplierspartnership.org](https://supplierspartnership.org)

# Introduction

- Please use the **“Q&A”** window to ask question of our panelists.
- Please note this webinar is being recorded.
- A link to view the recording and a copy of the slides will be provided to all registrants in the coming days.



# Introduction

Since 2002, Suppliers Partnership for the Environment (SP) has been the leading forum for global automakers, their large and small suppliers, the US EPA and other government entities from around the world to work together to improve the environmental sustainability and business value of the global automotive supply chain



SP Members & Liaisons

# Introduction

Looking forward, several of the world's largest automakers and suppliers have announced the next-generation of ambitious environmental sustainability goals aspiring to advance *positive* environmental, economic and community impacts through their operations and value chains.

As members of SP, industry environmental sustainability leaders are coming together to work toward a shared vision of an automotive industry with **positive** environmental impact.



## [Our Focus Issues](#)

# Introduction

Supporting industry dialogue and action on common definitions, tools, and resources for measuring and advancing carbon reduction efforts across the value chain on the path toward carbon neutrality.

## CARBON NEUTRALITY



Facilitating deeper discussions and connections among SP members related to current and emerging environment, health and safety (EHS) issues impacting the automotive industry.

## EHS FORUM



Supporting SP members in better understanding the rapidly changing ESG landscape and proactively preparing their organizations to address current and emerging ESG expectations.

## ESG LEADERSHIP



Supporting OEM / supplier dialogue and education on emerging global product chemical compliance process management challenges and opportunities.

## GLOBAL PRODUCT CHEMICAL COMPLIANCE PROCESS MANAGEMENT



Identifying, developing and advancing nature-based solutions as effective tools to improve climate resilience and pollution prevention, as well as provide human well-being and biodiversity benefits.

## NATURE BASED SOLUTIONS



Working to move the automotive industry towards a circular materials economy by promoting collaboration amongst automotive manufacturers and suppliers to incorporate sustainable practices, processes, and materials in the production and content of vehicles.

## SUSTAINABLE MATERIALS



Working to identify voluntary opportunities and best practices to minimize packaging waste and promote consideration of sustainable packaging materials.

## SUSTAINABLE PACKAGING



Promoting information exchange on key challenges and opportunities related to end-of-life management of advanced EV batteries and identifying opportunities for strategic pre-competitive collaboration across the value chain to advance best practice in responsible management of such batteries in North America and beyond

## RESPONSIBLE BATTERIES



Providing a structured process to assist companies of all sizes within the SP network to share innovative ideas and solutions that can address our member companies' significant environmental sustainability challenges and needs.

## TECHNOLOGY & INNOVATION



Developing a sector-wide water stewardship program that is centered on a decision matrix and action plan that helps member organizations achieve excellence in their water stewardship performance

## WATER STEWARDSHIP





**Matt Howard**  
The Water Council



**Doug Andrews**  
Lear Corp.



**James Cartwright**  
Nalco Water

# Our Speakers

# SP Water Stewardship Action Matrix

Matt Howard, VP Water Stewardship, TWC

# Program Deliverables

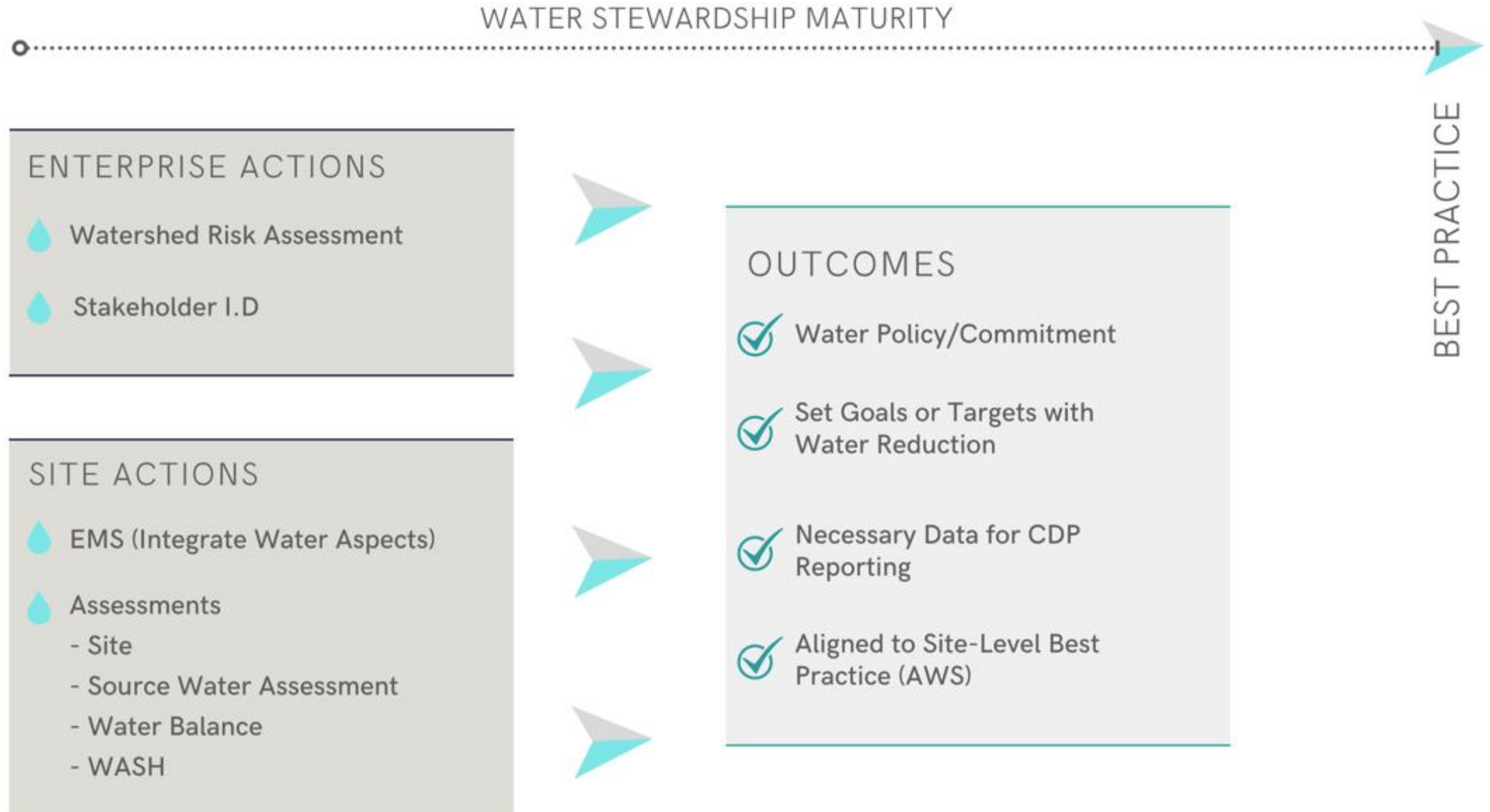
- **A Water Stewardship Action Matrix**

- Plan-do-check-act approach to identify actions directly mitigating key risks
- Useful water-related data generated for external reporting and improved operational efficiencies

- **Action Matrix Pilot Testing**

- One to three members to ensure the path to continuous improvement that is developed will work across the SP membership

# Water Stewardship Action Matrix



# Pilot Sites

- Lear La Cuesta (Juárez, MX)
- Lear PN I&II (Piedras Negras, MX)
- Nalco/Ecolab (Garyville, LA)

# Action Matrix Guidance

- Overview of water stewardship
- Factors to consider prior to implementing
- Implementation guidance
- Outcomes and next steps
- Glossary



[www.thewatercouncil.com](http://www.thewatercouncil.com)

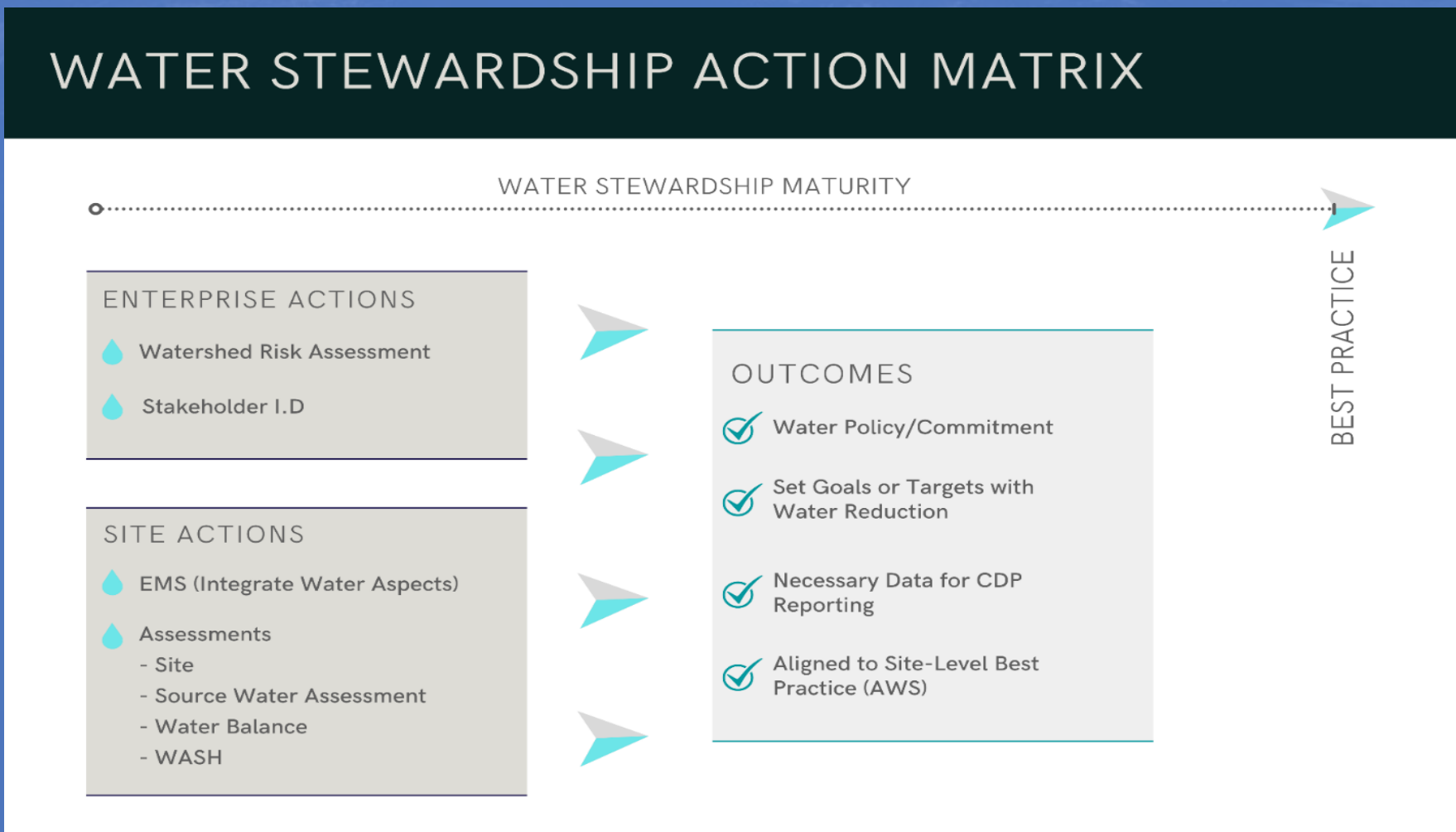
Twitter: [@WaterStewardMH](https://twitter.com/WaterStewardMH)

Email: [mhoward@thewatercouncil.com](mailto:mhoward@thewatercouncil.com)

# Water Stewardship Pilot Program – **LEAR**

Lear La Cuesta-Fuentes Complex  
Lear Piedras Negras 1&2

# Water Stewardship Action Matrix



# Water Stewardship Pilot Implementation

- Two Lear plants selected in water scarce areas (extremely high): La Cuesta and Piedras Negras, Mexico.
- The Water Council applied the Action Matrix Guide virtually at both pilot sites.
- Site level actions included:
  - Site ISO 14001 significant aspects included water reduction targets.
  - Understanding each site's water sources as municipal from groundwater. Identify if the source is adequate for long-term use and the risk of limited availability.
  - Identification of all site water uses.
  - Completed a water balance using a mass balance of water intake and water discharge to identify the consumption, losses and water retained in products that can lead to water reduction opportunity projects.
  - Conducted a WASH self-assessment to determine sufficient water needed for drinking, food preparation and sanitation.

# Water Stewardship Summary



## Lear Mexican Operations - One Page Initiative Management

Initiative: Water Stewardship - La Cuesta- Fuentes

Champion: Ricardo Padilla

Team Members: R Rodriguez Maint Mgr/I Lazalde and H Wong EH&S Leaders/A Villagrana CI Mgr

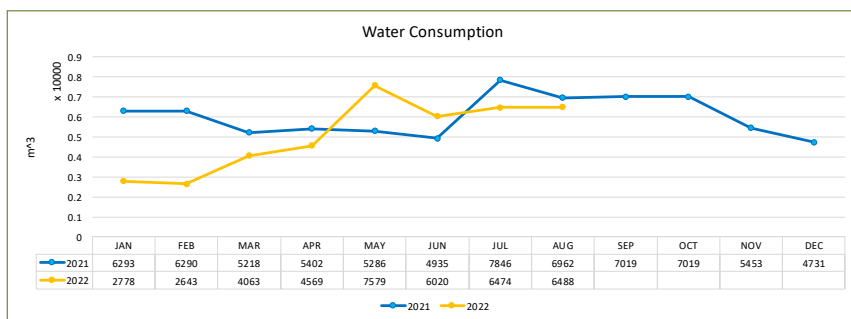
### 1. Background - Current situation:

After complete the Water Stewardship Action Matrix in La Cuesta-Fuentes Complex supported by the American Consultant we have the next results:  
Watershed Risk Assessment, Physical Risk Quantity (Extremely High 4-5); Water Stress (Extremely High >80%); Groundwater Table Decline (Low-Medium 0-2 cm/y); Internannual Variability (Low-Medium 0.25-0.50); Seasonal Variability (Low-Medium 0.33-0.66); Drought Risk (Low-Medium 0.2-0.4); Riverline flood risk Stress (High 6 in 1,000 to 1 in 100); Coastal Flood risk (Low 0 to 9 in 1,000,000)

### 2. Objective - Impact trend:

- Optimal use of water in the Cafeteria and Restrooms to avoid waste and leaks.
- Reduce costs associated with the consumption of water

TREND IN LA CUESTA -FUENTES WATER CONSUMPTION - TRIM DIVISION



### 3. Potential causes, opportunities and roadblocks:

- Right now we don't have any method, system or process to re-use water in the complex
- All the stormwater and rainwater are captured in a catchment well located within the complex

### 4. Key activities plan - Performance Drivers: Frequency, Severity & Risk Premium

Activities	Due Date	Resp.	Status	Comments - Update
1. Install strategically flow water meters (Restrooms, Kitchen, Evaporators and Fire System)	Q4 2022	R Rdriguez (Maint Mgr)		To buy and install the devices
2. Update the records to analyze the database	Weekly	EHS, I Lazalde and H Wong (EHS Leaders)		Optimal use of water and reduce costs
3. Change current urinals for waterless urinals	Q2 2023	R Rdriguez (Maint Mgr)		Consider a PAR for these proyect
4. Investigate with the JMAS the option to use the "purple line" (treated water)	Q4 2022	EHS, I Lazalde and H Wong (EHS Leaders)		
5. Optimize the water used for the irrigation in green areas	Q4 2022	R Rdriguez (Maint Mgr)		

### 5.- Financial Resources Required: CAPEX approval

Edit and submit the PAR's to obtain the authorization

**B** Plan

**Y** In progress

**R** Behind Plan

**G** Complete

# Water Stewardship Action Plan

- Strategically identify potential water losses and repair them (restrooms, kitchen, evaporators and fire system).
  - ✓ Buy new water flow detection devices to identify usage during visual inspection.
  - ✓ Update the daily water consumption database to better track usage by installing meters to measure the use in different processes more frequently.
  - ✓ Identify potential water losses due to leaking pipes, valves or connections.
- Change remaining 12 urinals to waterless urinals.
  - ✓ 30 waterless urinals already in use.
- Review the option of using treated water in other plant processes.
  - ✓ Air conditioner condensation water recovery project was started for use in toilets and irrigation system.
  - ✓ Backwash water from the reverse osmosis can be used for the toilets.
- Optimize water used for irrigation in green areas (50 m<sup>2</sup> with 5 trees) by installing a drip system.

# Water Stewardship Action Plan



- Flow water meters for visual detection
- Change urinals to waterless

# Water Stewardship Conclusion

With the implementation of the Water Stewardship Action Matrix, it was possible to:

- Detect information and data not previously identified, as well as failures in water measurements and water leaks.
- Completing the water balance improved our vision of the water system and provided better control of how much is consumed, as well as where to implement improvement ideas.
- Add lessons learned from this pilot to our own Water Stewardship Playbook for use at Lear site globally.

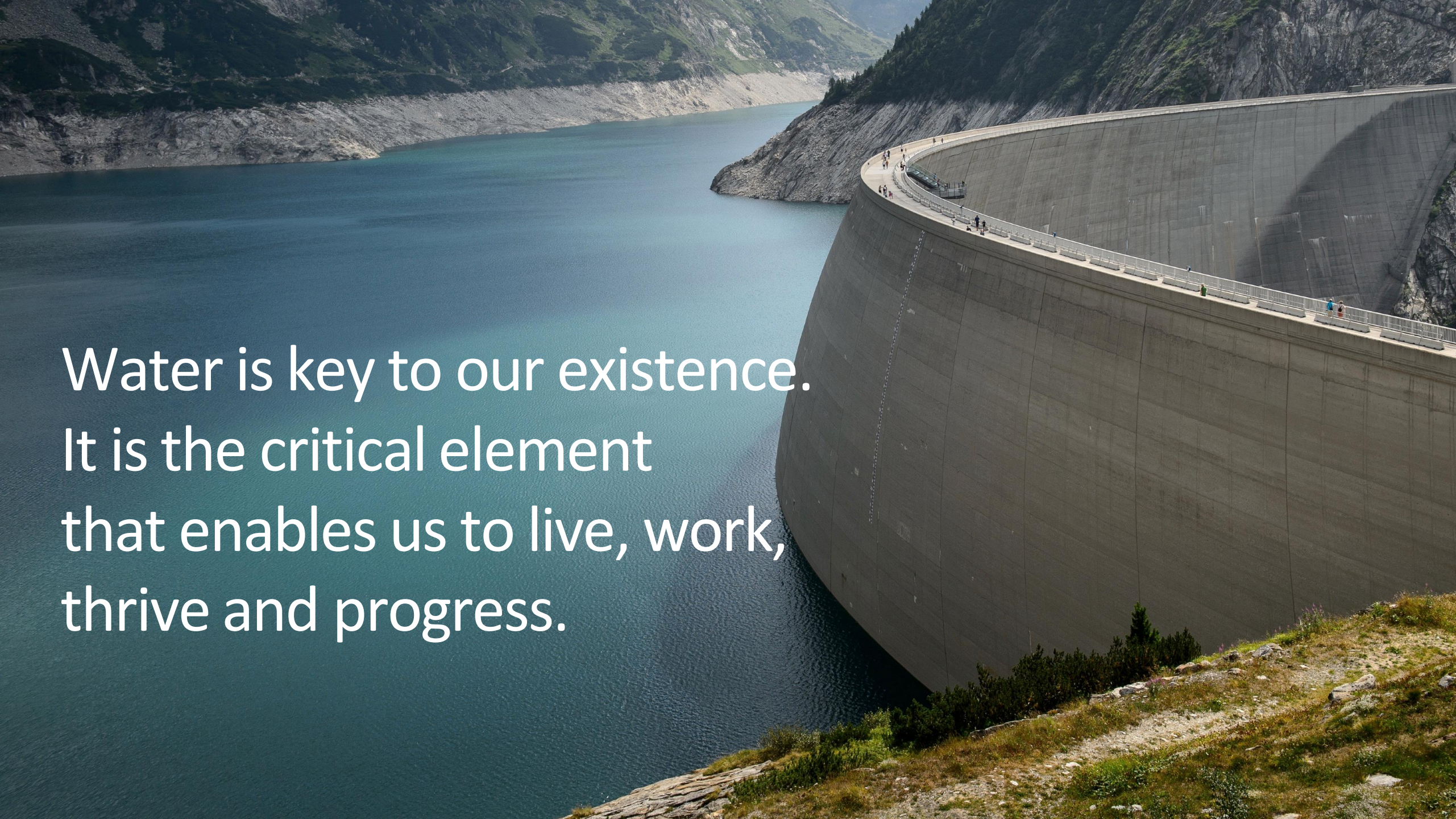
# Questions?



SUPPLIERS  
PARTNERSHIP  
FOR THE  
ENVIRONMENT

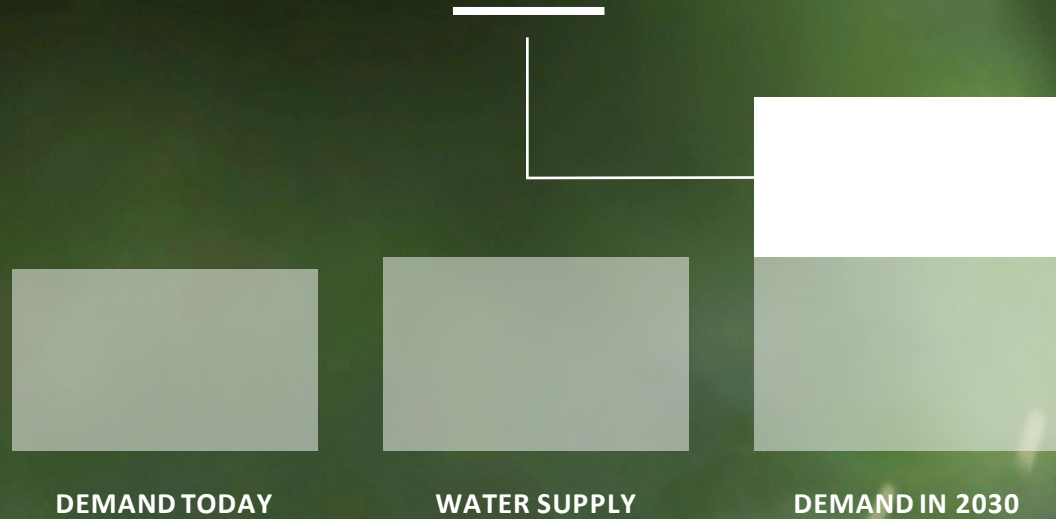
# Nalco Water – Garyville, LA Water Stewardship Strategy

James Cartwright  
NA Regional SHE Manager  
Nalco Water, An Ecolab Company

A large, curved concrete dam stands prominently on the right side of the image, its surface showing a grid of construction joints. A walkway with a white railing runs along the top of the dam, where several small figures of people can be seen. The dam is situated in a deep valley, with a vast, calm reservoir of deep blue water extending to the left. The surrounding mountains are rugged, with patches of green vegetation and rocky slopes. The sky is clear and bright, suggesting a sunny day.

Water is key to our existence.  
It is the critical element  
that enables us to live, work,  
thrive and progress.

# By 2030, Demand For Clean Water Will Surpass Supply By Over 40%



GOOD FOR WATER. GOOD FOR BUSINESS.

# Who We Serve

BUILDINGS & FACILITIES



CHEMICALS



DATA CENTERS



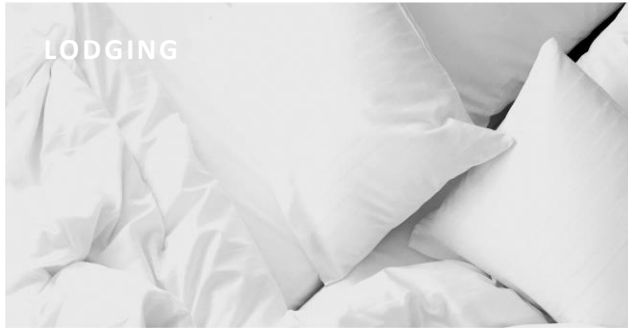
FOOD & BEVERAGE



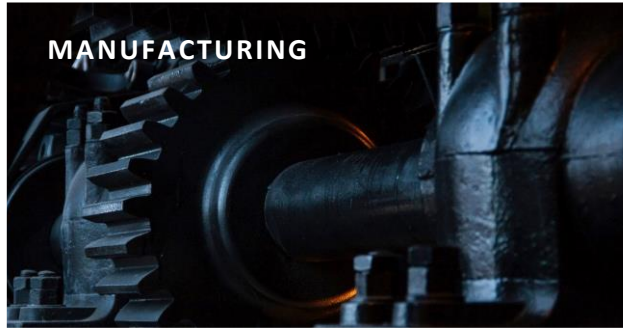
HEALTH CARE



LODGING



MANUFACTURING



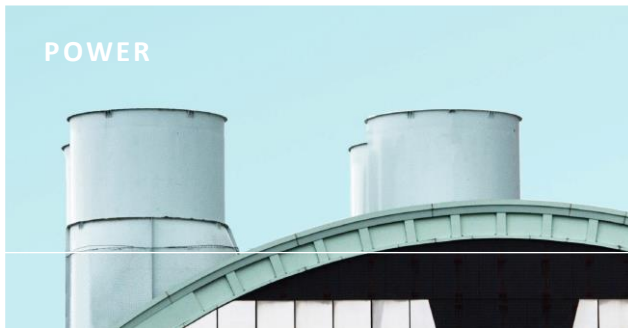
MINING



PULP & PAPER



POWER



ALUMINUM & STEEL



TRANSPORTATION



EVERYWHERE IT MATTERS

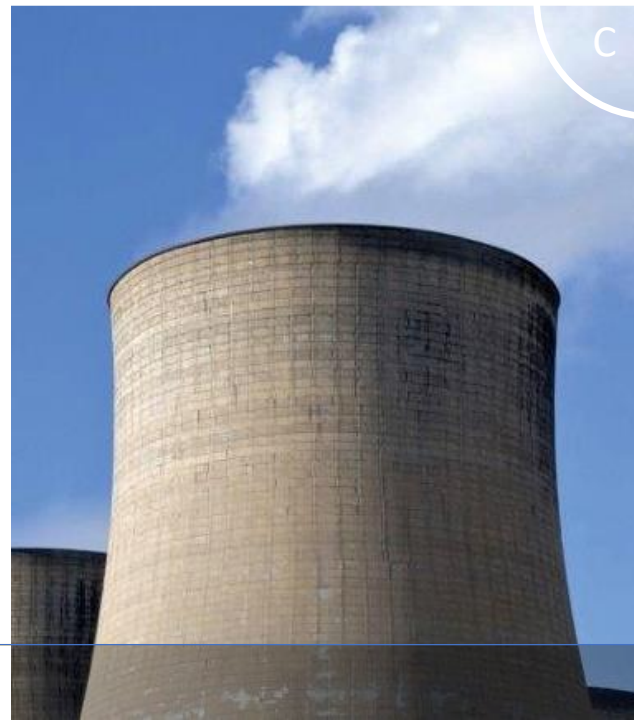
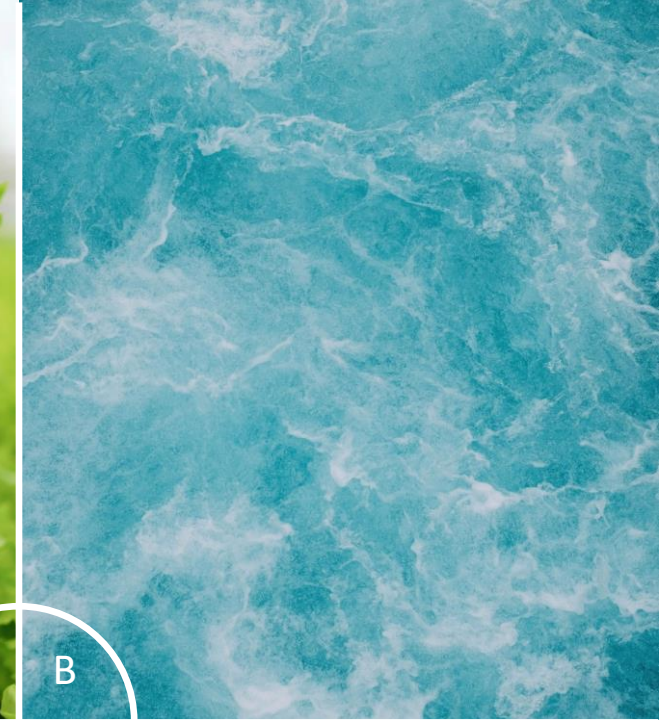
# Four Areas Of Focus

A Safe Food

B Clean Water

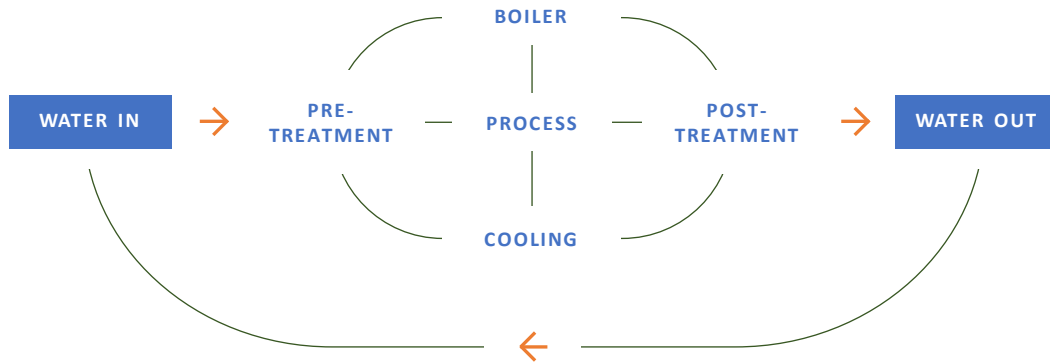
C Abundant Energy

D Healthy Environments



# The Nalco Water Model

## Plant Process



**BACKED BY A GLOBAL NETWORK OF OVER 6,000 EXPERTS  
CLOSELY SUPPORTING OVER 40,000 CUSTOMERS**

## Delivering Value

### FOR OUR CUSTOMERS:

- ⬇️ Minimize Water Use
- ⊕ Maximize Results
- 💰 Optimize Total Costs

### FOR OUR WORLD:

- 🛡️ Protect the World's Water
- 💧 Saving Water for 1B People by 2030

# Garyville, Louisiana

- ▲ Nalco's largest most diverse manufacturing site
- ▲ 20+% of Legacy Nalco Company's worldwide production volume
- ▲ Situated on 220 acres
- ▲ 7 Production Units, Lab, W/H, Tank Farm
- ▲ Maintenance, Utility, and Waste Treatment
- ▲ 268 products manufactured for 1,838 SKU's
- ▲ Set up for 947 and 14,482 SKUs
- ▲ 178,000 metric tons produced in 2019
- ▲ Key supply point for global intermediates
  - Acrylamide, DADMAC monomer
  - Anionic latex
  - Blends (Mining Group)

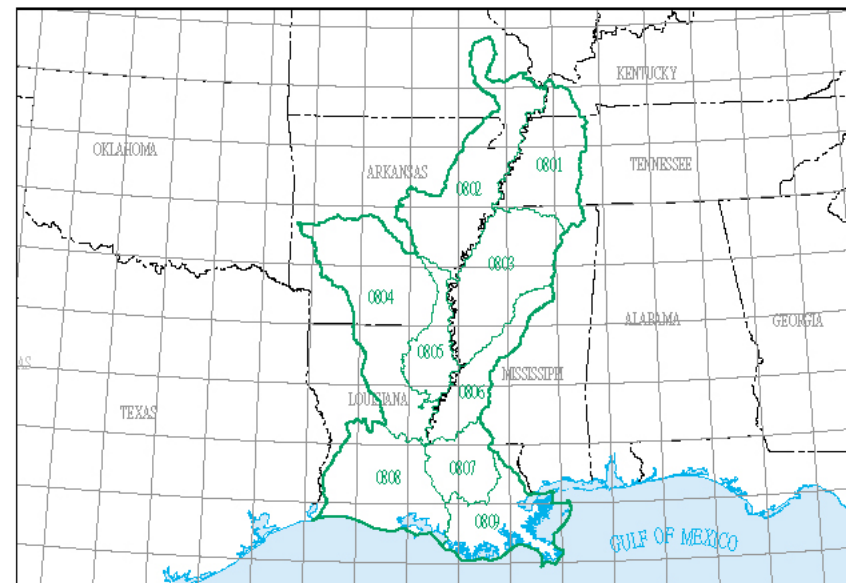
# Watershed Risk Assessment

- The Nalco Garyville site sits on the Mississippi River in between Baton Rouge and New Orleans in Garyville, Louisiana
- The facility is in HUC 08070204.

Watersheds in: 08 Lower Mississippi Region



Watersheds in: 08 Lower Mississippi Region



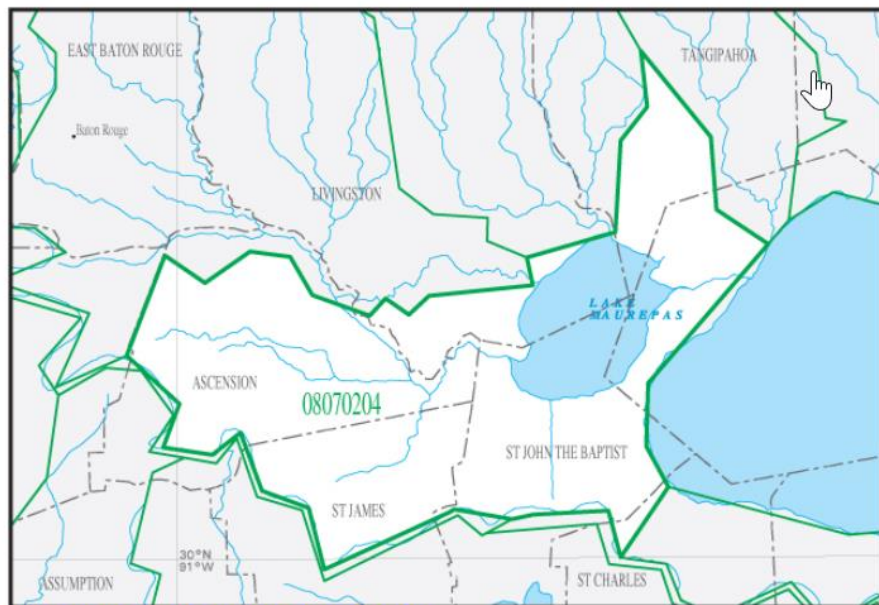
Click on the Map Above to View a Particular Subregion

# Watershed Risks

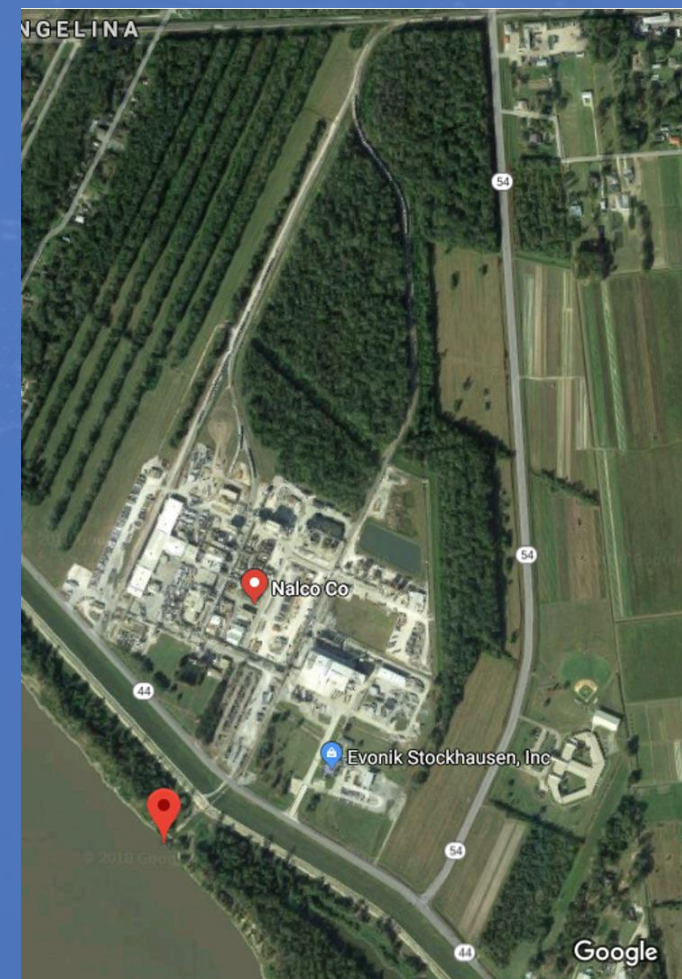
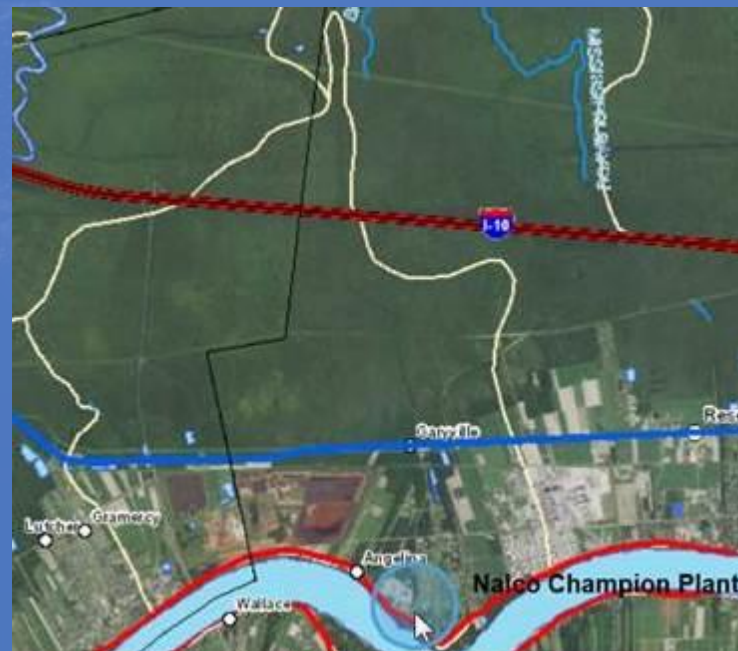
## Science in Your Watershed

### Locate Your Watershed

Watersheds in: 08 Lower Mississippi Region ▾



[Additional Information for this Watershed](#)



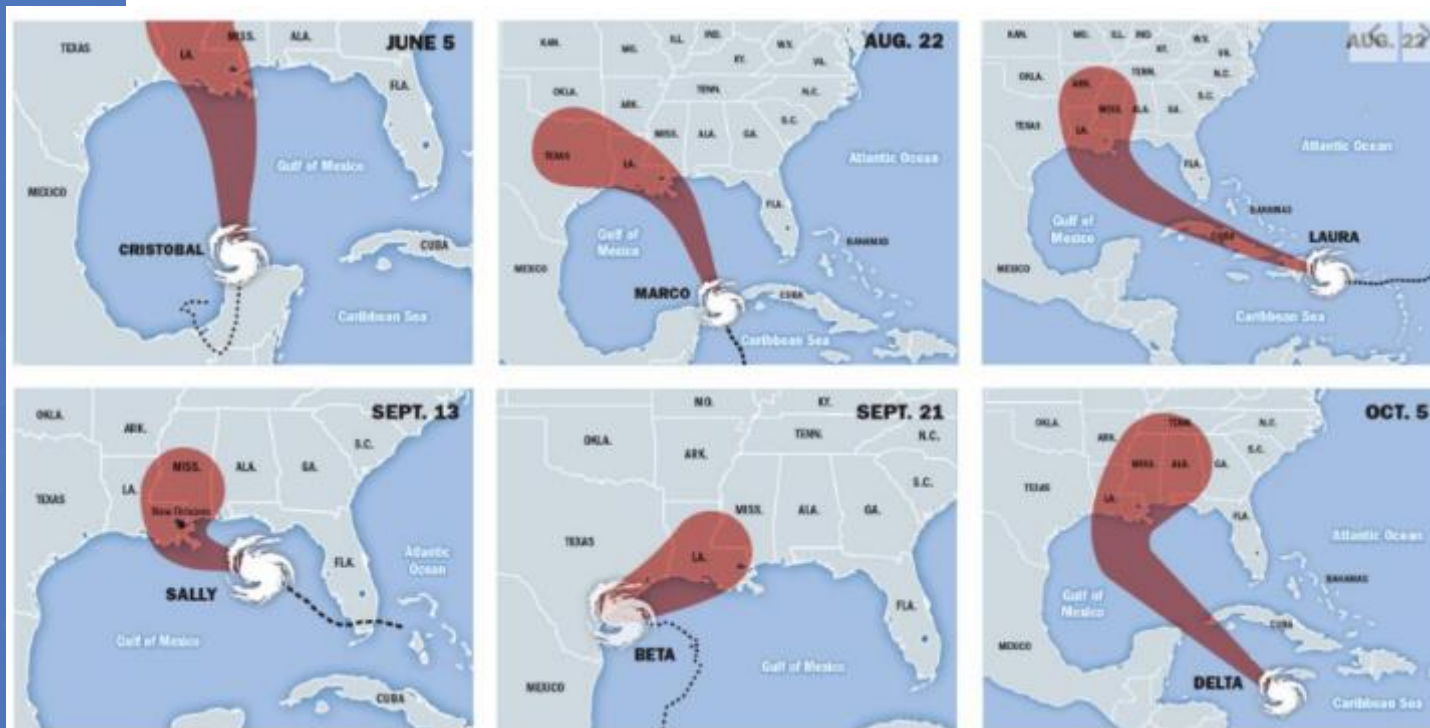
# Watershed/Facility Risks

Risk	Category (Shared, Site level)	Relation to AWS Outcome	Probability	Impact to Site	Prioritization (Probability*Impact)	Impact to Stakeholders	Impact to Nalco Water Garyville site
Natural Disasters (i.e. hurricanes)	Shared & Site Level	Governance, Water Balance, Water Quality	5	4	20	Safety, business continuity, financial, infrastructure damage	Safety, business continuity, financial, infrastructure damage
Flooding	Shared & Site Level	Governance, Water Balance, Water Quality, IWRA	5	4	20	Safety, business continuity, financial, infrastructure damage	Safety, business continuity, financial, infrastructure damage
Water pollution	Shared & Site Level	Water Quality, Water Balance	2	5	10	Business continuity, safety (drinking water)	Business continuity
Subsidence	Shared	Governance	5	2	10	Financial, safety, infrastructure damage	
Water infrastructure	Site level	Governance	3	3	9	Business continuity, financial, infrastructure damage	Business continuity
Loss of wetlands/species	Shared	IWRA	4	2	8	Ecosystem health, biodiversity, agriculture (e.g. pollination)	
Water infrastructure (levy, municipal piping)	Shared	Governance	2	3	6	Business continuity, financial, infrastructure damage	Business continuity
Chemical spills	Site level	Water Quality, Water Balance	3	2	6	Recreation, safety	Reputation, safety

# Understanding the Risk

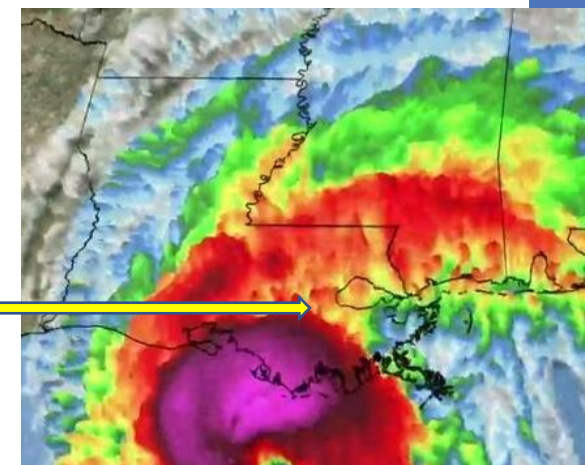
1.7.1 Water risks faced by the site shall be *identified*, and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact

- Associates' safety
- Business continuity
- Hurricane Ida Impact – no power 17 days, no water 10



Zeta 10/28

Garyville



# Stakeholder ID

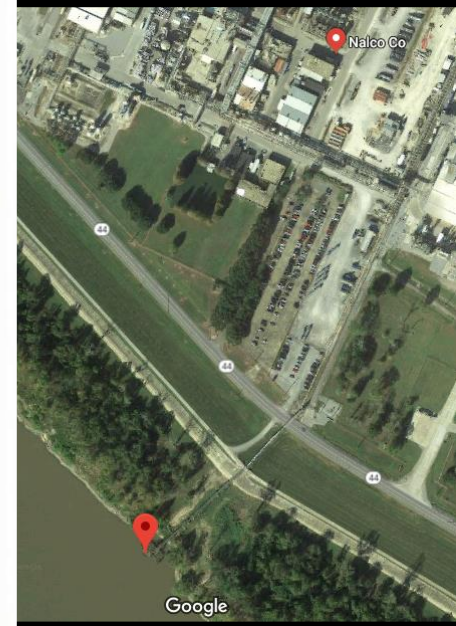
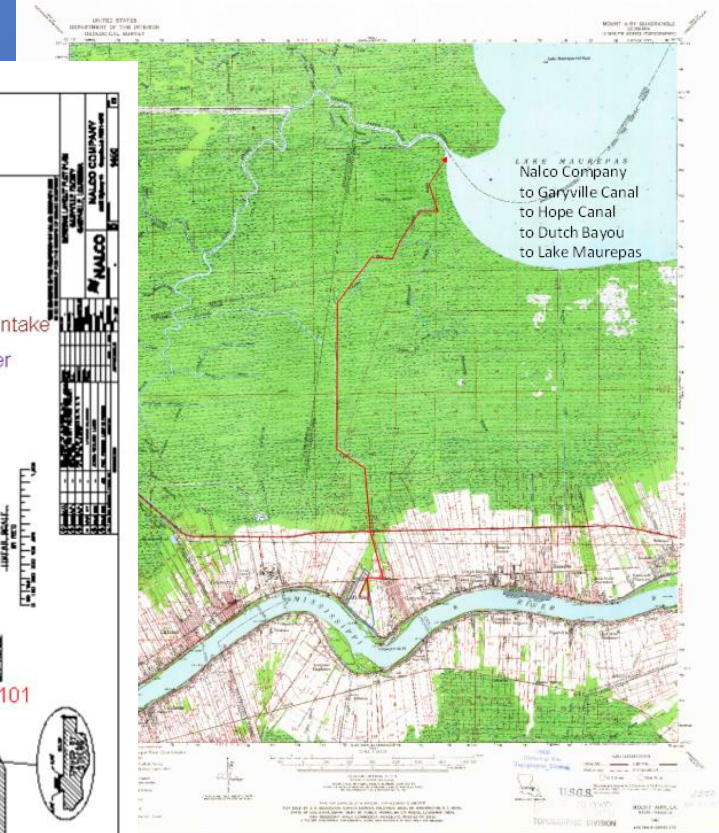
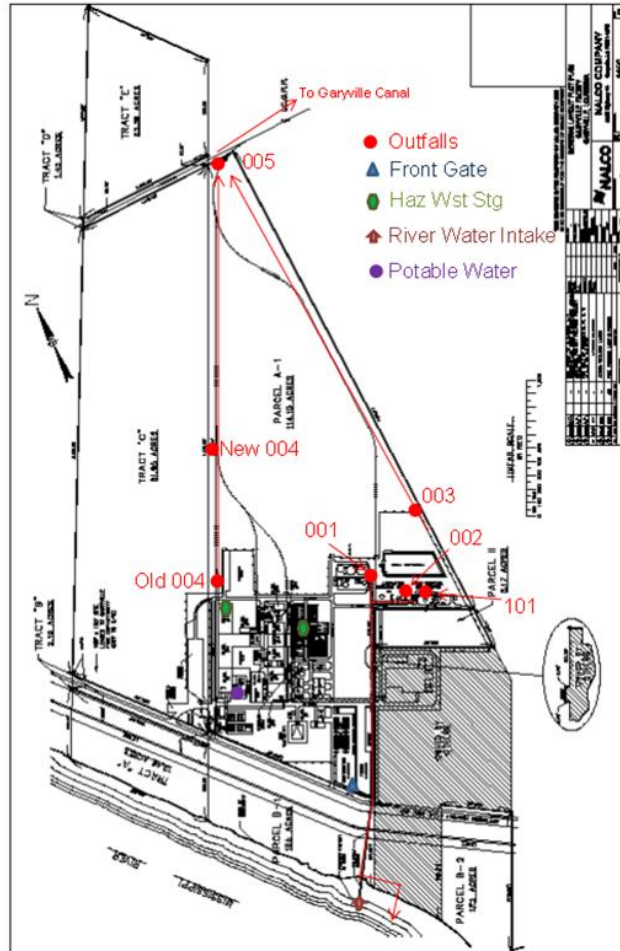
Stakeholder	Role	Date Consulted	Identification Process	Evidence of Consultation	Current Engagement	Potential Engagement	Current Influence	Potential Influence	Water-Related Challenges
Matthew Howard	The Water Council	5/7/18	Introduction to plant from corporate sustainability team	Email, site visit, training on standard	Medium	Medium	Medium	Medium	G,L,B,Q,IWRAs,I,WASH Interest in expanding AWS in region
AWS	Head of Standards & Assurance	Ongoing open discussed	AWS	Email	Low	Medium	High	High	Interested in water stewardship, discussed WASH specifically & other shared challenges broadly
Emilio Tenuta	VP Sustainability Ecolab	Monthly Meetings	Ecolab's partnership in AWS	Email; meetings	Low	High	Medium	Medium	G,L,B,Q,IWRAs,I,WASH Interest in expanding AWS in Ecolab Network
Ashley Johnston	Plant Leader, ChampionX	Ongoing	Proximity to site; service agreements to purchase water from Nalco and pay for waste water treatment	Email, meetings	High	High	Medium	Low (as plants potentially separate further)	G,L,B,Q,IWRAs,I,WASH Nalco Garyville dependent (they buy water from us)
Byron Hollis	Plant Leader Garyville, LA	Daily involvement	AWS Site Implementer	Emails, meetings, etc	High		High	High	G,L,B,Q,IWRAs,I,WASH Interest in implementing AWS at Garyville Site
Nhi Blanchard	SHE Manager	"	"	"	"		"	High	"
Anna Wertheim	Sustainability Engineer	Monthly Meetings with plant and GSC network; regular communication with plant on3e	Ecolab's partnership in AWS	Email; meetings	High		High		G,L,B,Q,IWRAs,I,WASH Implementing AWS at other sites
Justin Ehrenwerth	<a href="#">The Water Institute</a>	5/7/18	Important and impactful non-profit in region with shared goals	Emails; meetings	Low	Low	Low	Low	G,B,Q,IWRAs,I Interested as a research group for watershed management *COVID

# Stakeholder ID

Community Action Panel (CAP)	Nalco Marathon CAP	Bimonthly meetings, next is Nov 12	Local organization to discuss Industry and community Shared challenges	Meetings	Low (COVID)	Medium	Medium	Medium	G,L,B,Q,IWRAs,I,WASH
Louisiana Water Synergy Project	USBCSD	Quarterly Meetings, last on 10/1			Low (COVID)	Low	Low	Low	Interest in sustainability solutions in the watershed
St John Parish	Parish	5/7/19	Potable water provider to site	Emails	Low	Medium	High	High	G,L,Q,I,WASH
Marathon	Neighbor/Customer	CAP meetings	Neighbor just downstream of us	Meeting Minutes from CAP	Low	High	Low	Medium	All same water challenges as the site as they are downstream of us in the catchment
General Public	Neighbor	CAP Meetings	Drinking water comes from same source	Meetings	Low	Medium	Low	High	Interest in shared water challenges in the region
Restore the Earth Foundation – Taylor Marshall	Local nonprofit	10/1/19 was last meeting	Active local nonprofit	Emails, meetings	Low	Low	Low	Low	Interested in watershed restoration and sustainability accounting for nature based solutions
LDEQ (Louisiana Department of Env Quality)	Public sector	Through CAP meetings and public comment/notice	Statewide env. Protection agency	Meetings, public notice	Medium	Medium	Medium	High	Interested in water quality and watershed resiliency. Renewal of water permits
TNC (The Nature Conservancy)	Local nonprofit	Through CAP meetings and other offline meetings	Local nonprofit, Loch Leven Project lead	Emails, meetings	Medium	Low	Low	Low	Interested in watershed restoration and water stewardship. Updates on water restoration projects
Nalco Water Commercial Engineering – Brendan Kranzmann & team	Water Reclaim Project Assessment	Monthly meetings	Water management	Emails, meetings	Low	Low	Low	None (not pursuing it)	Helping to design and do a feasibility study on a water reclaim system in the plant – determined it would cost \$5MM and is not feasible at this time
Nalco Water Sales	Water Utility Management	Monthly meetings	Water management	Emails, meetings	High	Medium	High	Medium	Works with the plant to manage water in the utilities space of the plants *include engagement Laura
Army Corp of Engineers	Public Sector	Phone call and mail		Mail and phone calls	High	Medium	High	Medium	Infrastructure, governance, IWRA Alerting of diversion project that will create infrastructure and aid in potential flooding and water quality issues as well as aid in restoration of wetlands
Evonik - Dieter Bettinger	Plant Leader Evonik	7/30/19	Proximity to site; service agreements to purchase water from Nalco and pay for waste water treatment	Emails; meetings	Low	High	High	Medium (if something happens to water)	G,L,B,Q,IWRAs,I,WASH Nalco Garyville dependent (they buy water from us)

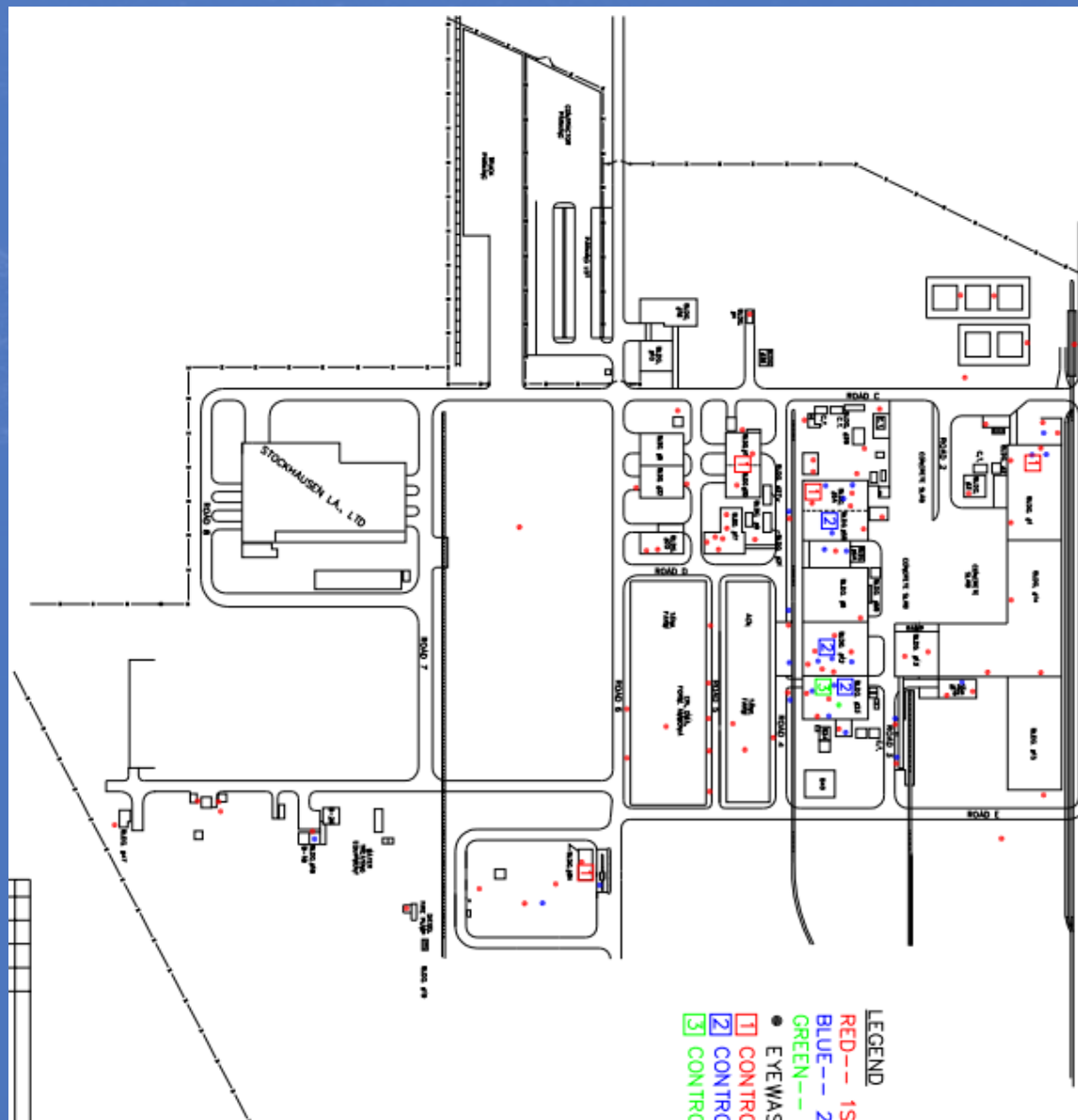
# Assessments: Site

- Site Water Infrastructure

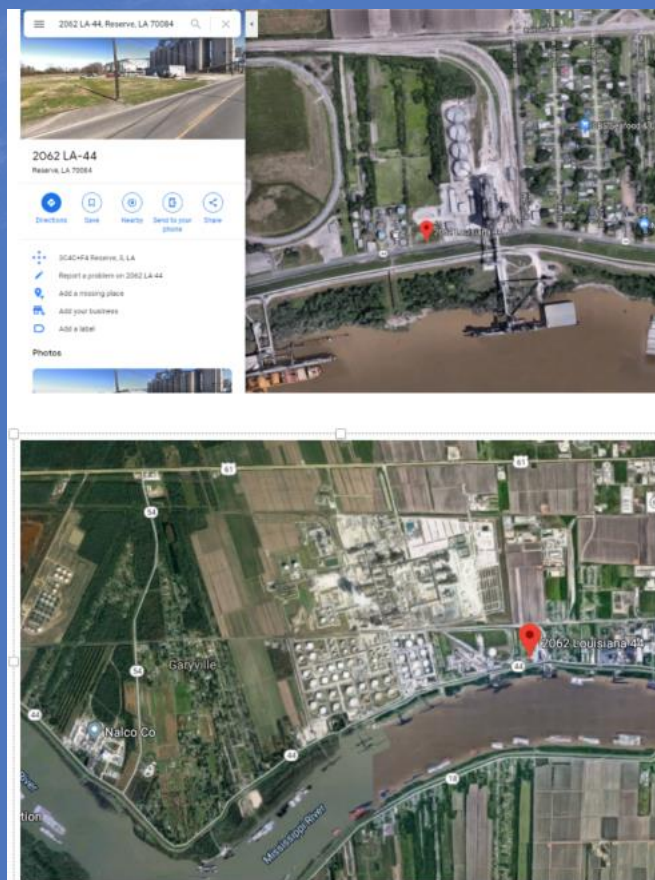


# Assessments: WASH

- 150 Nalco Water Employees
- 50 Resident contractors
- 15 Total Restrooms
- Parish and bottled water available

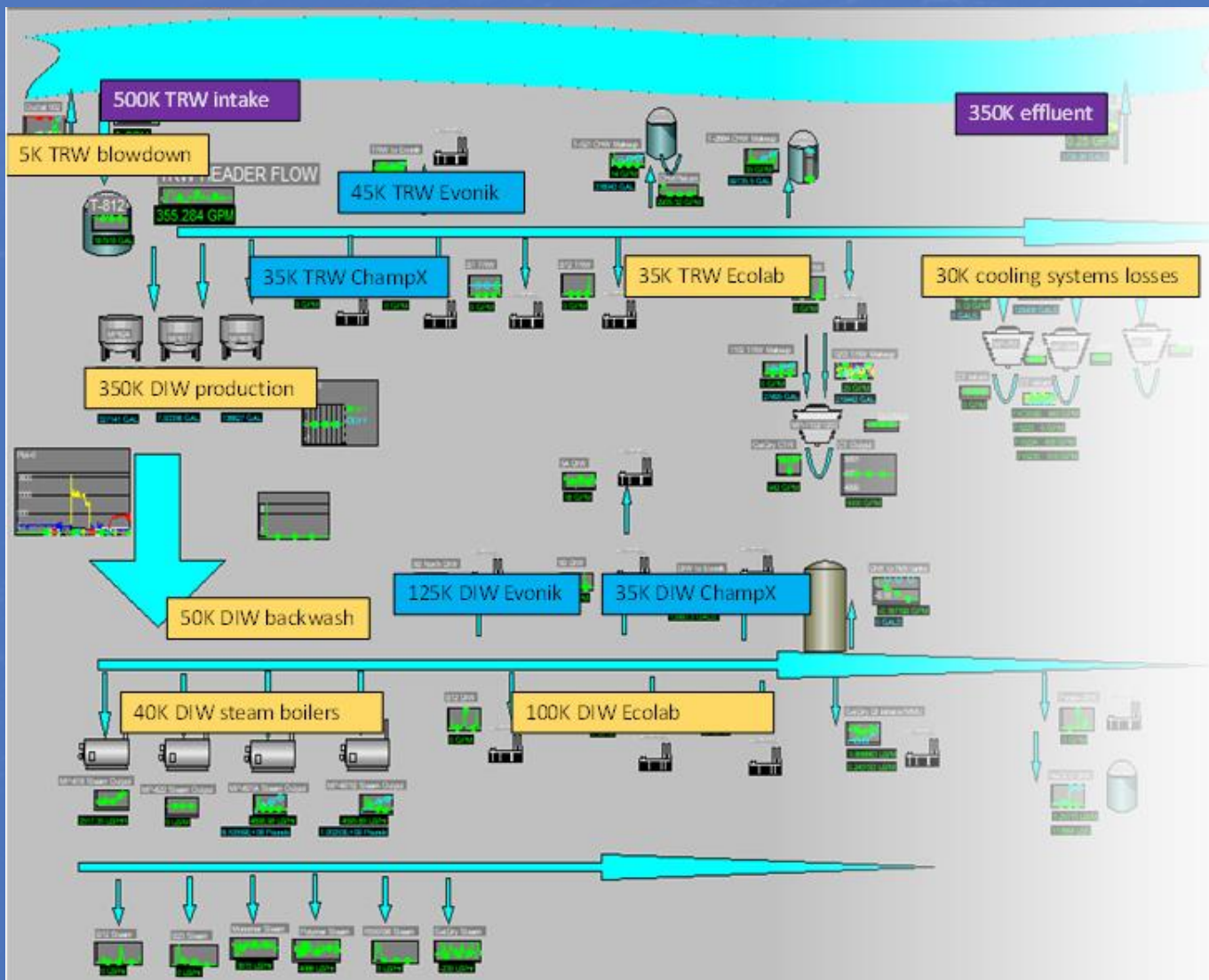


# Assessments: Source Water



- The Mississippi River
- St. John the Baptist Parish Utilities – Potable water
- Onsite softening, demineralizers, and wastewater treatment
- Quality Checks for influent and effluent

# Assessments: Water Balance



- 500,000 gallons withdrawn from Mississippi
- 350,000 returned as effluent
- ~50,000 in evaporative/blowdown losses
- ~100,000 in final products
- 240,000 in TRW & DIW created for onsite stakeholders (Evonik/ChampionX)
- Site water demands vs river flow
  - 1/8<sup>th</sup> of 1 sec

# Outcomes: Water Policy / Commitment

**ECOLAB**

3628 Hwy 44  
Garyville, LA 70051

June 25, 2023

## Water Stewardship Commitment

I commit to supporting and promoting the site's pursuit of responsible water stewardship by conserving, reusing and recycling water and renewing water quality. I will support the site's efforts to achieve the outcomes of water stewardship, namely good water governance, good water balance, good water quality and healthy important water related areas. I commit that the site will attempt to engage stakeholders throughout their efforts in an open and transparent manner and that the site will comply with all legal and regulatory requirements, support water related national and international treaties, as well as respect legal and water-related rights. I will support the site's efforts to continually improve and adapt their water stewardship actions and plans and ensure that there is sufficient organizational capacity, as well as local staff time & resources, to successfully implement the AWS Standard.



Byron K Hollis

Garyville Site Plant Manager

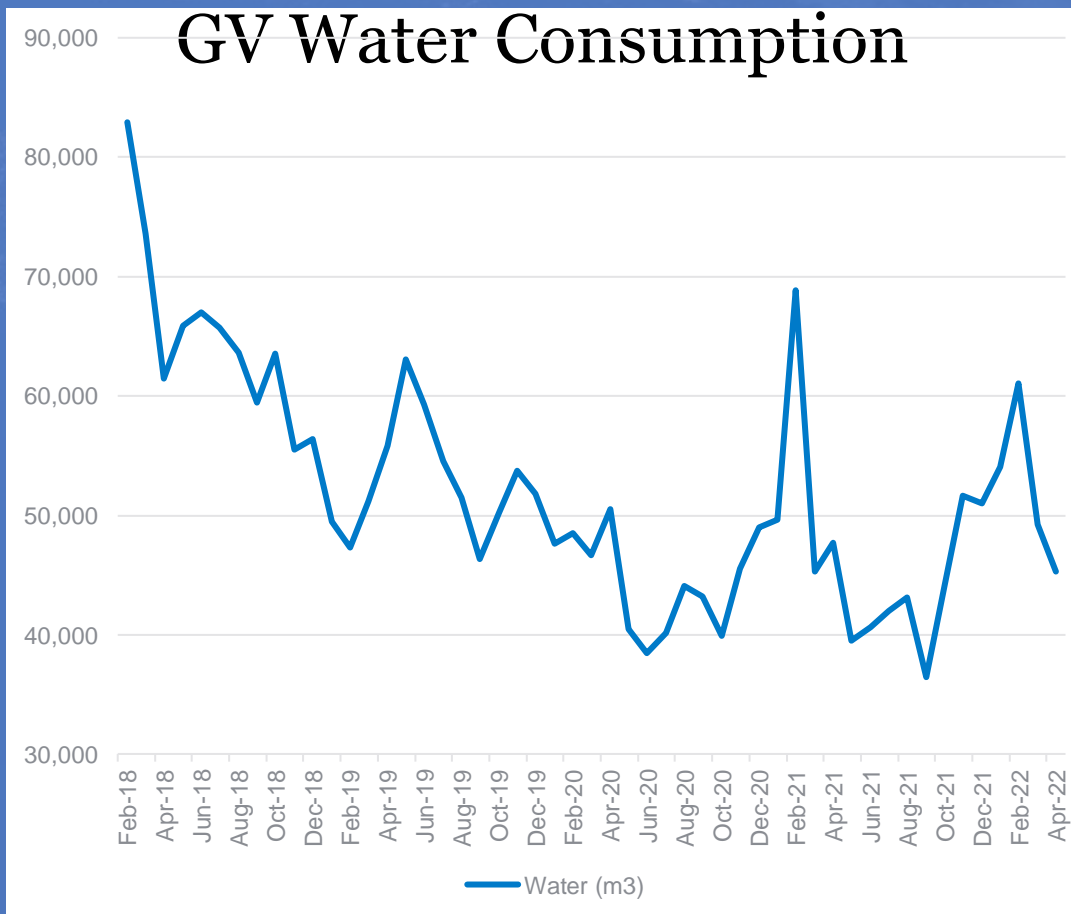
# Environmental MGMT Systems

- LDPES discharge permit
- DOM – (utilities section)
- OGSM – sustainability data / reporting
- Monthly Sustainability Network calls
- SLT Weekly – Water usage, TOC, Regulatory issues
- SHE Daily Meeting – Regulatory compliance daily actions
- Quality and quantity KPIs discussed throughout

# Outcomes: Site Goals / Targets with Water Reduction

Goal: 3% YOY Water intensity reduction

- 2018 – 767,457 (cubic m)
- 2021 – 559,960
- Nearly 55MM gallon reduction
- Challenges: Hurricane Ida, Freezes, Production mix, volume
- Progress: Washout Matrices, Nalco 3DTrasar Technology, Sand filter recycling



# Outcomes: Site Level Best Practice

*SCS Global Services does hereby certify that an independent assessment has been conducted on behalf of:*

## Nalco Water - Garyville, LA Facility

450 Rosenwald St, Reserve, LA, United States

SCS Global Services herewith certifies that the aforementioned site or group has been independently certified to the AWS standard and is both managing its water resources and contributing to efforts within the catchment. The site or group has been found to be in full compliance with the following standard:

### Alliance for Water Stewardship International Water Stewardship Standard (v2-0;2019)

Industry Sector: Chemicals & Other Materials Production

Catchment: Lower Mississippi River Basin

Period of Validity: 3 years

Valid from: 16 December 2019 to 15 December 2022

Scope: Single Site

Certification Level: Core

AWS Reference Number: AWS-000051



For more information regarding the scope of this certificate and the activities of the certificate holder, please refer to the publicly accessible assessment report located at: [www.aws.org](http://www.aws.org). This certificate remains property of SCS Global Services and can be withdrawn in case of terminations as mentioned in the contract or in case of changes or deviations of the above mentioned data. The licensee is obligated to inform SCS Global Services immediately of any changes in the above-mentioned data. Only an original and signed certificate is valid.

**SCS**global  
SERVICES



Stanley Mathuram, PE, Vice President  
SCS Global Services

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

# Learn More



To download the SP Water Stewardship Action Matrix, visit:  
<https://www.supplierspartnership.org/water-guidance/>

# Questions?

**As a reminder:**

- Please use the “Q&A” window to ask question of our panelists.

