

Industrial Pretreatment Plant

Stakeholder Advisory Panel

Recap to LCA Board of Directors: August 12, 2024



Lehigh County Authority



Pretreatment Plant (PTP)

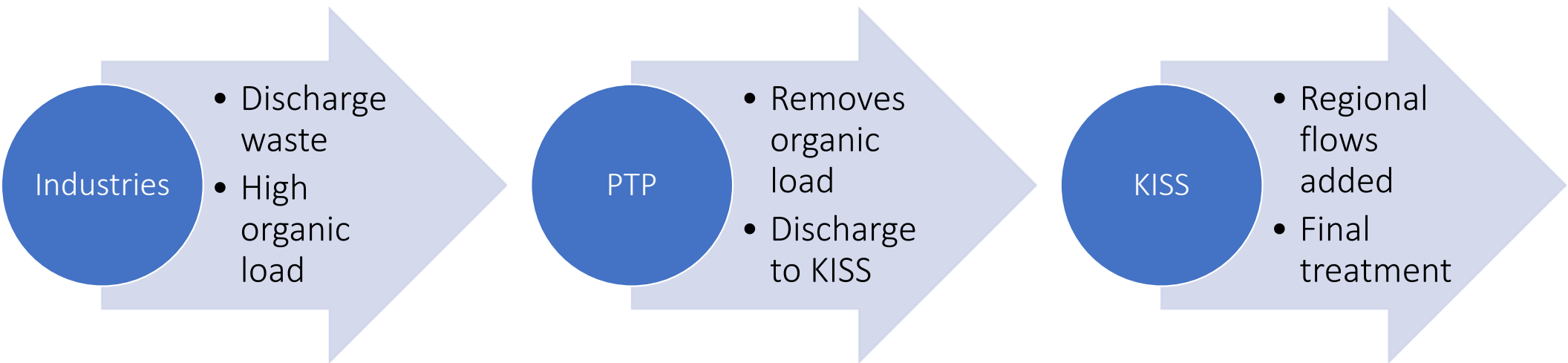
1980s Goal: Centralize pretreatment & support growth in region

Constructed by County of Lehigh in 1990

Transferred to LCA in 2009 debt-free

Viewed as a significant community investment!

How it works



Final discharge to Lehigh River

Three major challenges



Pretreatment Plant at end of its useful life – major replacement needed



Limited / no remaining capacity available for new industrial growth



No financial mechanism currently in place to capture capital costs

Financial Challenge:

**Limited capacity
renew the facility**



Boston Beer as direct customer



Other industries as indirect customers



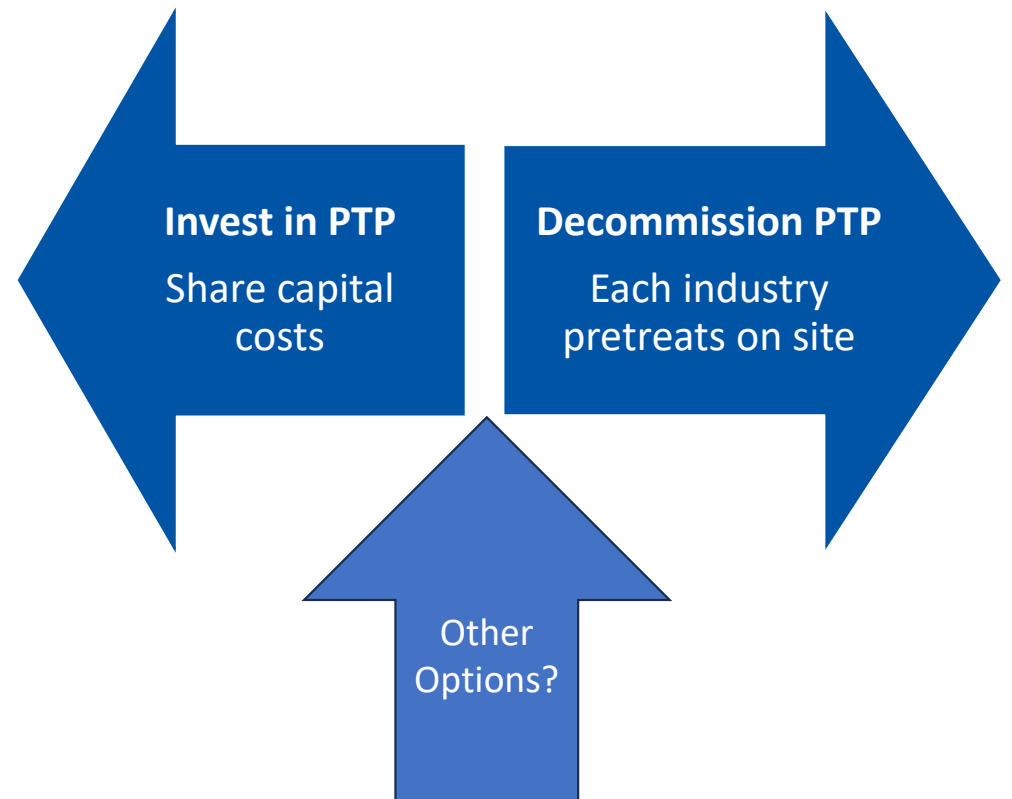
Waste hauler program driven by market price



Intermingled with residential wastes that don't need pretreatment

We are at a crossroads

- + PTP needs significant investment
- + Few options to consider
- + Decision is time sensitive
- + You are key stakeholders in this decision!



**Broad
Decision
Making**

WE ARE HERE!

**Communications
& Outreach**

**Approval
Process!**

**Finalizing
our Plans**

DECISION-MAKING Considerations

*Whose decision is it
anyway?*

+ **Lehigh County Authority**

Implement the regional elements of selected solution, including approval of new borrowing & contracts

+ **Existing Industrial Customers**

Participate in regional solution or pretreat on-site

+ **KISS Municipalities**

Approve regional Act 537 Plan that includes the selected solution & associated cost-sharing approach

+ **Other Important Voices**

- Federal & State Regulators
- Local & Regional Planning Commissions
- Stakeholders Offering Financial Support / Other Partnership Approaches
- All Customers

PTP Stakeholder Advisory Panel Participants

Industrial Customers

- Boston Beer
- Ocean Spray
- Coca-Cola
- Keurig Dr Pepper
- SunOpta

Upper Macungie
Township

County of Lehigh

City of Allentown

LVEDC

LVPC

Chamber of
Commerce

Major Developers
(City Center Group,
Jaindl Land Co.)

Local Legislators
(Rep. Schlossberg, Sen.
Coleman)

Pennsylvania
Department of
Environmental
Protection

Pennsylvania
Governor's Action
Team

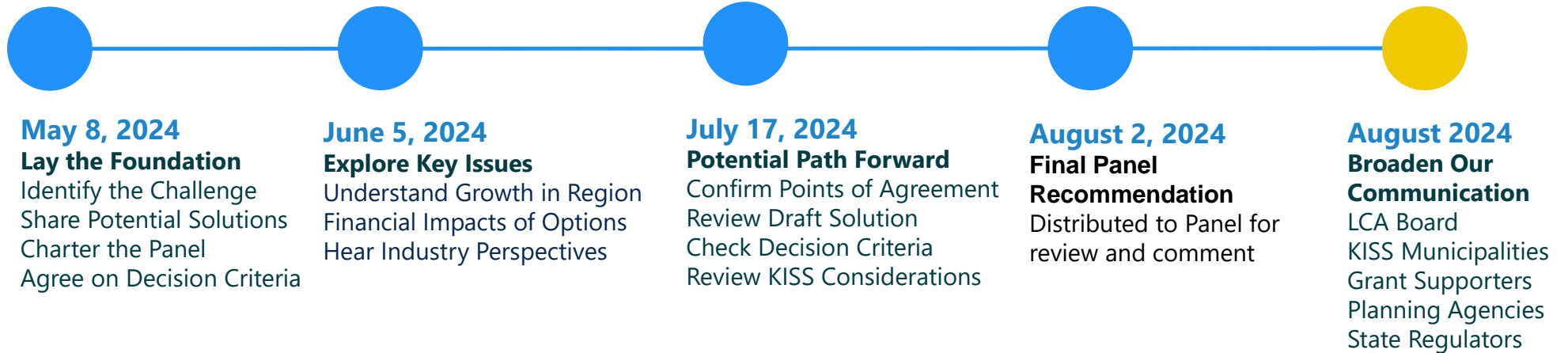
Other Stakeholders &
LCA Resources

Our selected solution must...

- 1 Address current industries' needs for pretreatment
- 2 Support the region's desired economic development goals
- 3 Make sense financially for customers of today and tomorrow
- 4 Ensure continued protection of our environmental resources



PTP Stakeholder Panel Process



Key questions throughout Stakeholder Panel process

In the 1970s and 1980s, the region bet on the idea that “if we build it (the PTP), they will come.”

Given the build-out of the area that has already occurred, is that concept still valid?
If so, how do we fund it?



A Vibrant Business Community

- Who's here now?
- Review of economic contributions
- What is the potential for growth in the food/beverage sector?
- Other features that make this region great?

Regional Economic Impact of PTP

22 businesses across 11 industries in Lehigh County are supported by PTP operations.

These businesses employ **2,950 workers** and generate **\$250 million in annual earnings**

Regionally, the PTP supports:

5,780 jobs

\$452 million in annual earnings

\$2 billion in annual sales/output

PTP Customers Key Industries and Concentrations

Employment in industries served by PTP is concentrated in Lehigh County at higher rates than the national average.



Bottled Water Manufacturing

Job concentration: **33x** national average

Average Annual Wage (2023): **\$75k**

PTP Customers account for: **91%** Of County-wide industry employment



Refrigerated Warehousing and Storage

Job concentration: **9x** national average

Average Annual Wage (2023): **\$60k**

PTP Customers account for: **60%** Of County-wide industry employment



Breweries

Job concentration: **6x** national average

Average Annual Wage (2023): **\$84k**

PTP Customers account for: **49%** Of County-wide industry employment



Soft Drink Manufacturing

Job concentration: **5x** national average

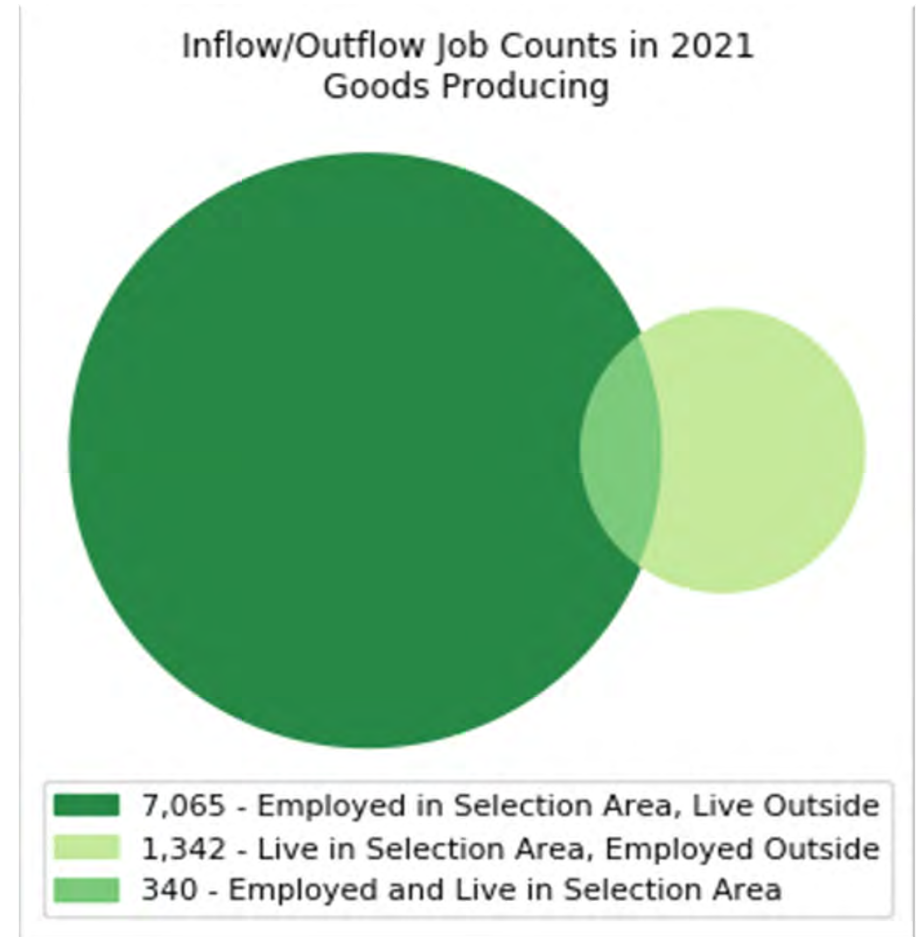
Average Annual Wage (2023): **\$80k**

PTP Customers account for: **89%** Of County-wide industry employment

Who's working here?



Source: <https://onthemap.ces.census.gov/>



LOGISTICS INFRASTRUCTURE



± 1 mile



±4.5 miles

Lehigh Valley Interchange



±16 miles



±16 miles

Port of Philadelphia

±65 miles

Port of NY/NJ

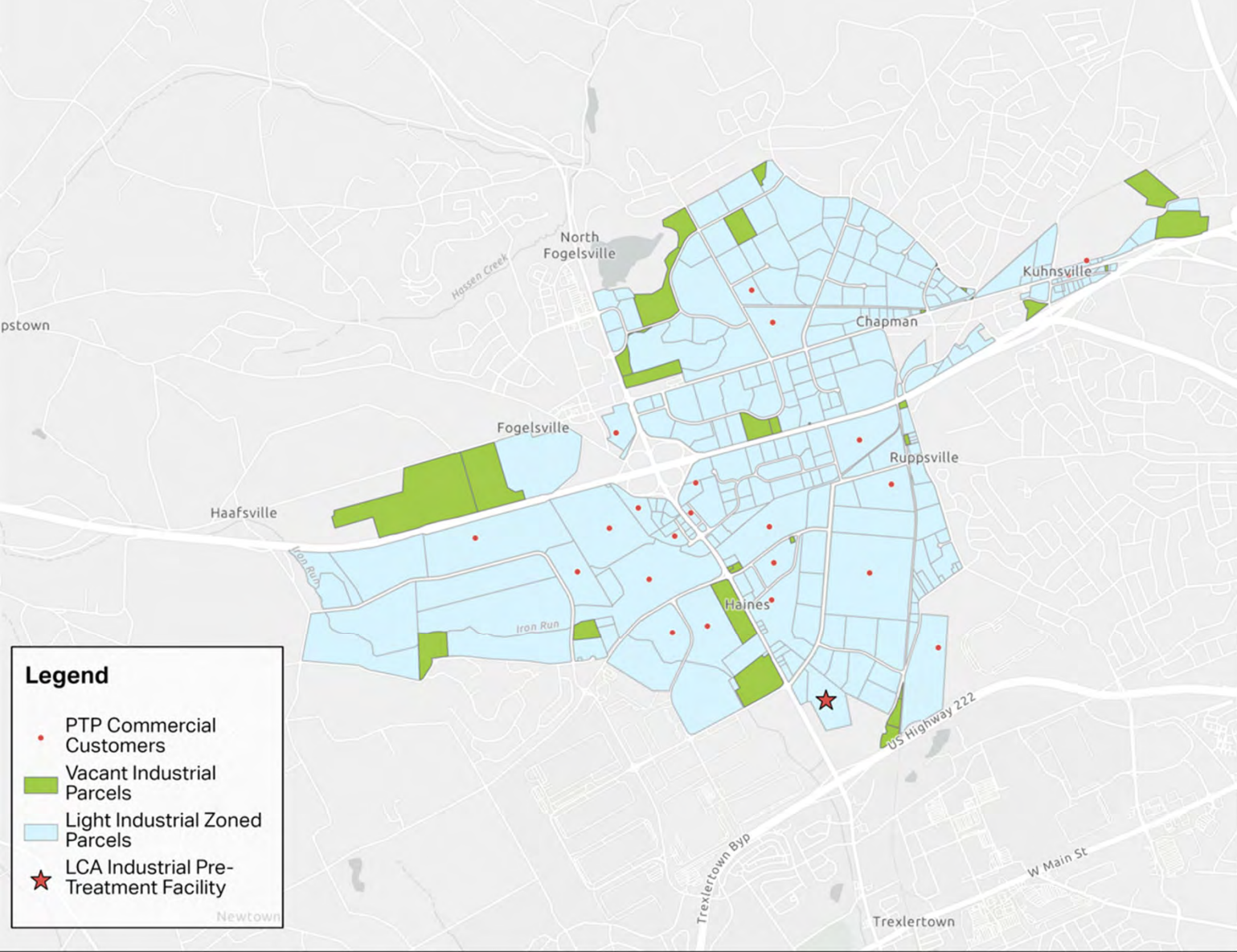
±91 miles

Port of Baltimore

±133 miles



Vacant Industrial Parcels in PTP Service Area



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Given the build-out of the area that has already occurred, is that concept still valid?
If so, how do we fund it?



Key Panel Discovery # 1

70% of the region's economic growth will come from the expansion of existing customers – so our solution must address current customer needs first, to allow them to thrive and grow.

Feedback from existing industries

Keurig Dr Pepper

- **Favors regional solution**
- Does not want to be in the wastewater business
- Currently land-locked with no additional space
- Four years into a 20-year lease.
- Adding on-site pretreatment would decrease long-term viability

SunOpta

- **Favors regional solution**
- Located here since 2012
- Property is leased and fully built out
- Wants capital costs of PTP built into annual rate
- Has on-site pretreatment at other locations – knows the operational challenges

Coca-Cola

- **Favors regional solution**
- Located here since 1997
- Access to rail, transportation, water and labor major drivers
- Invested about \$25M over the years
- Has space for on-site treatment if needed

Ocean Spray

- **Favors on-site pretreatment approach**
- Exploring more cost-effective approaches
- Wants to be self-reliant and have more control over costs / process
- Recognizes cost risk associated with decisions made by others (region / other industries)

Boston Beer

- **Solution unclear**
- Purchased site in 2008; significant capital investment at the site
- Assumed existing PTP arrangement from prior brewery operations
- Access to transportation and inexpensive water are major benefits
- Wants to see solution that is good for region and industry

Key Panel Discovery # 2

Existing industries want to stay and grow in Lehigh County, but this Pretreatment Plant decision impacts each customer differently – a custom solution may be required.

Key Panel Discovery # 3

Panel wants to see a solution that solves the existing financial problem – allowing for ongoing capital investment and avoiding the need to repeat full-scale replacement in the future.

Key Panel Discovery # 4

PTP's current waste hauler program provides an important service and should be preserved, but needs to stand on its own financially (at a minimum) or add value to the overall facility operation.

Points of Agreement

+ A preferred approach emerges



What We Heard

Regional Approach

- Strong preference for this option vs. plant shut-down
- Strong feeling that regional approach is needed to support industrial growth

Regional Financing

- Limited support for regional funding; grants unlikely to solve the problem
- Incorporating cost into regular sewer rates is problematic

Existing Industries

- Heavily impacted by the decision
- Solution should support existing industries' ability to thrive in Lehigh County

Hauler Program

- Small business & restaurants rely on this service
- Solution should seek to maintain program if possible

Summary of Options Evaluated

Option	Key Features	Cost
Option 1: Traditional “Master Plan”	<ul style="list-style-type: none"> + Total rebuild of existing facility + Largest users’ waste segregated into new treatment unit + Capacity for new industrial growth 	\$267 Million
Option 2: Balanced Regional Approach	<ul style="list-style-type: none"> + Significant modification to existing treatment process + Partial segregation of industrial wastes + Capacity for new industrial growth (regional cost share \$77M) + Tax credit eligible & waste hauler friendly 	\$171 Million
Option 3: Industry Focused Approach	<ul style="list-style-type: none"> + Waste from all five large industries segregated + All other wastes bypass PTP + New industrial growth not addressed, could be added later + Tax credit eligible & waste hauler program eliminated 	\$93 Million
Option 4: Decommission the PTP	<ul style="list-style-type: none"> + Near-term critical upgrades only + Transition plan (2-5 years) for industries to pretreat on-site 	\$4 Million + Industrial on-site systems

** Costs for Option 2 & Option 3 shown in future \$ after estimated tax credit*

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NEW Narrowed Solution

Option	Key Features	Cost
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Option 3: Industry Focused Approach (original)	<ul style="list-style-type: none"> + Waste from all five large industries segregated + All other wastes bypass PTP + New industrial growth not addressed, could be added later + Tax credit eligible & waste hauler program eliminated 	\$93 Million
Option 3A: NEW Customized Industry Solution	<ul style="list-style-type: none"> + 2 industries pretreat on-site; 3 segregated to new facility + All other wastes bypass PTP + Capacity for new industries can be added later + Tax credit eligible & waste hauler friendly 	\$32 Million
Option 4: Decommission the PTP	<ul style="list-style-type: none"> + Near-term critical upgrades only + Transition plan (2-5 years) for industries to pretreat on-site 	\$4 Million + Industrial on-site systems

PTP Stakeholder Panel

Recommendations

+ Concepts & questions LCA Board of Directors should consider



Customized Industry Approach

1. Current major industries have choice to participate or opt-out
2. Refine engineering & financial analyses accordingly
3. Optimize waste hauler program to ensure operational and financial benefit
4. Restructure rate-setting process, tapping fees, and customer relationships to capture future capital costs

Meeting Future Needs

Recognizing new PTP will be sized to meet current needs:

1. What is the cost for a new industry to “add on” to the PTP?
2. Plan ahead to support new industries
3. Establish trigger points for future PTP expansion

Pursuit of Grants

1. Panel supports LCA efforts to pursue grants
2. Consider grants that directly support industries whether joining the LCA project or handling pretreatment independently

Finalizing Panel's Recommendations

1. Draft recommendation for panel review
2. Continued engagement with industries
3. Presentation to LCA Board
4. Review with municipalities
5. Final feedback loop to Stakeholder Panel
6. Incorporating final PTP solution into regional sewer plan

Public Communication

Key Message: This is an important decision for our region, our environment, and economy. Broad participation by many stakeholders helps ensure we make good decisions. The solutions we are developing will help our region thrive!

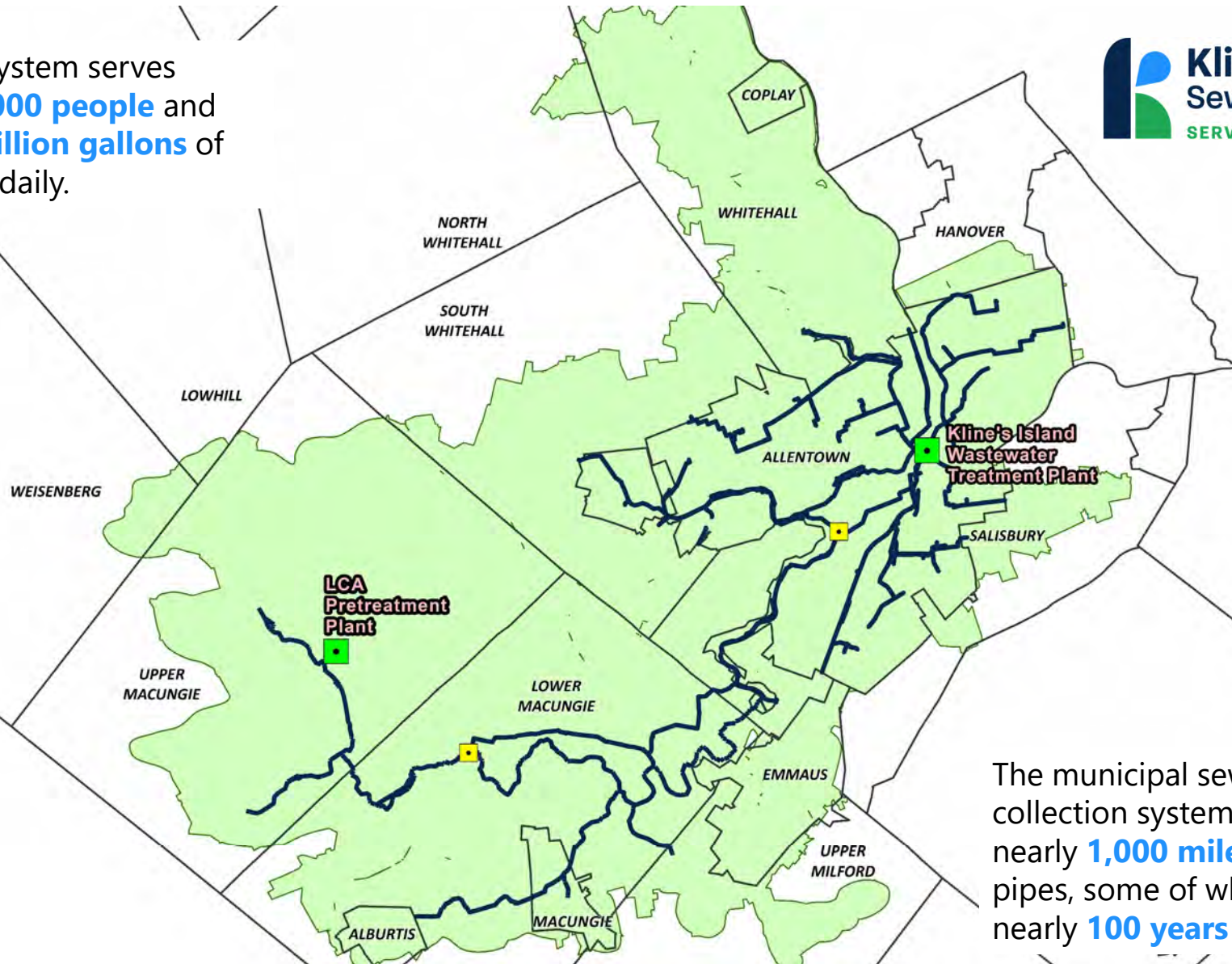
1. Public info at lehighcountysewer.org
2. Other public communication?

Other Considerations

+ Regional Sewer Plan



The sewer system serves about **270,000 people** and treats **32 million gallons** of wastewater daily.



The municipal sewer collection systems include nearly **1,000 miles** of buried pipes, some of which are nearly **100 years old!**

Kline's Island Sewer System Faces Major System Challenges



Aging Infrastructure

Most KISS communities struggle with deteriorating infrastructure that is 50 to 100 years old, causing leakage and sewer overflows



Size of Existing Infrastructure

Our infrastructure is not designed for wet weather events that leak rainwater into the system, making sewer overflows worse



Capacity for New Connections

Many system components are at capacity today, regardless of the wet weather challenges, stalling potential economic development and growth



Regulatory Oversight

System overflows and permit violations have increased regulatory oversight, restricted new connections, compelling us to take action



KISS Act 537 Projects to be Completed 2026-2035

Major Plan Component	Cost Estimate
Kline's Island WWTP	\$51 Million
Pretreatment Plant (under review)	\$267 Million
NEW Little Lehigh Interceptor	\$23-30 Million
NEW Western Lehigh Interceptor	\$76-98 Million
Cost Estimate for Regional Components	\$417-446 Million
Municipal Sewer Rehab Programs	\$90 Million
Other Municipal Interceptors	\$54-58 Million
Cost Estimate for Municipal-Specific Components	\$144-148 Million
Total Cost Estimate	\$561-595 Million

KISS Municipality Decisions

1. How to share costs equitably?
2. Where will the funding come from?
3. How to share regional resources in new ways?
4. Challenges with approving a plan that includes significant rate increases?
5. What happens if we don't approve this plan?

Staying Engaged

+ Stakeholder Panel's support will help!



Other Next Steps

+ Summer / Fall Schedule



Schedule of Actions

July – August

- Finalize and communicate PTP Stakeholder Panel recommendations
- Finalize industry-specific requirements for new PTP project

September – October

- Complete regional sewer plan financial analysis & rate projections for presentation to municipalities
- Conduct “Open House” meetings for public review

November – December

- Finalize regional sewer plan with final PTP solution included
- Develop municipal review and approval process
- If possible, break ground on PTP project to secure tax credit

Thank you!

LCA Board Discussion & Questions



Lehigh County Authority