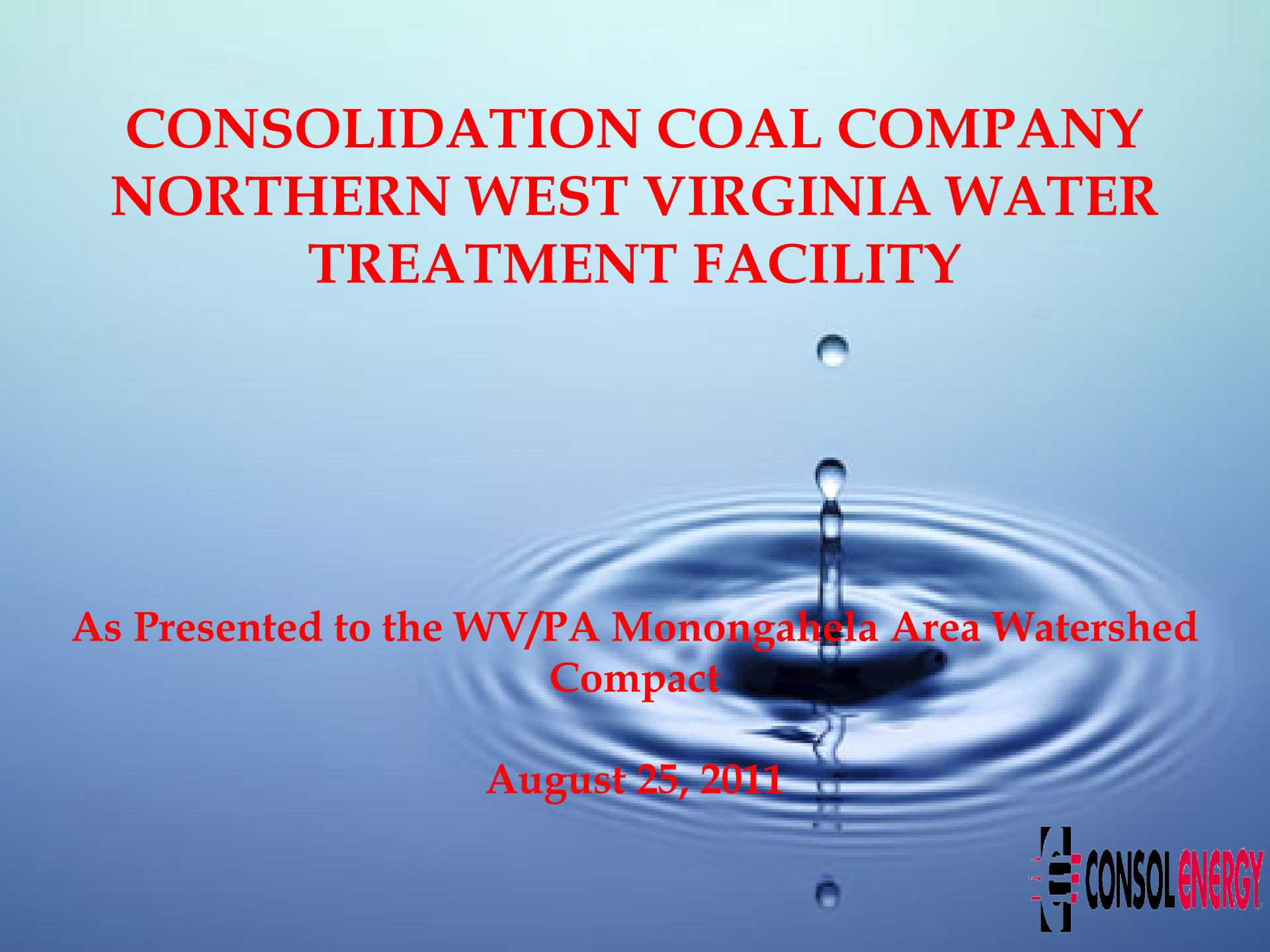
CONSOLIDATION COAL COMPANY NORTHERN WEST VIRGINIA WATER TREATMENT FACILITY



As Presented to the WV/PA Monongahela Area Watershed Compact

August 25, 2011

CONSOL ENERGY

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- CONSOL Energy operates three underground coal mines in the region.
  - Blacksville No. 2 Mine (Monongalia County, WV)
  - Loveridge Mine (Marion County, WV)
  - Robinson Run Mine (Harrison County, WV)
  - These mines directly employ over 1,500 persons
  - Each mining job can be linked to one additional support job (Vendors, Sub-Contractors, Suppliers, etc)
  - Therefore, CONSOL's mining operations can be associated to approximately 3,000 local jobs.

Safety

- CONSOL's safety record is nearly two times better than the industry average.
- To maintain the safety our miners and permit mining operations, the mines must be dewatered.
- Currently the mines are de-watered via deep well pumps.
- The mine water is currently treated at one of six existing treatment plants.
- The existing treatment plants remove impurities in the water mainly iron and manganese.

Compliance

- To ensure CONSOL remains in compliance with local, state, and federal water quality laws CONSOL has committed to constructing an advanced water treatment facility to treat for dissolved solids mainly chlorides & sulfates.

- The advanced treatment facility will be located near the city of Mannington at the former CONSOL Energy Nailer 79 Mine site.

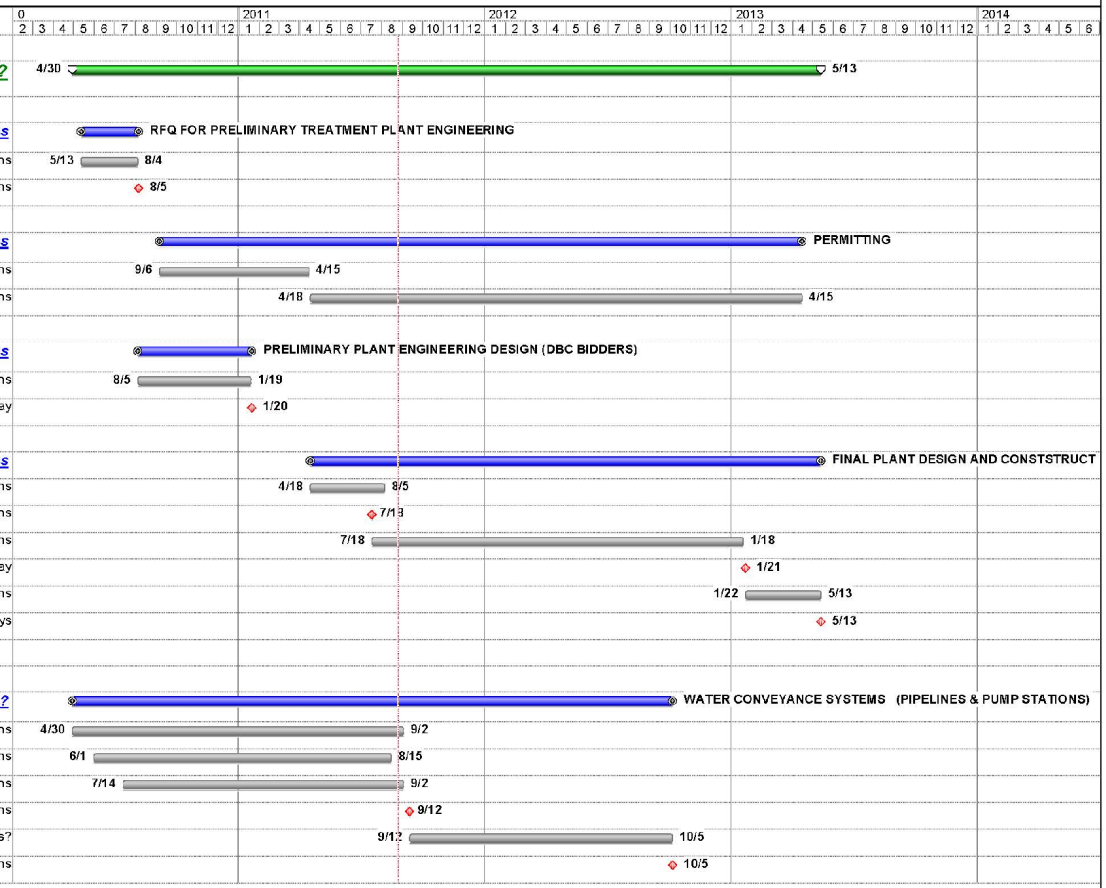
- The water will be transported from five existing and one proposed AMD treatment plants to the central advanced treatment facility via approximately 34 miles of pipeline.

CONSOL ENERGY™ Project Schedule

NORTHERN WEST VIRGINIA WATER TREATMENT FACILITY

OVERALL PROJECT SCHEDULE

ID	Task Name	Duration
1		
2	NWV WATER TREATMENT FACILITY DESIGN, PERMITTING & CONSTRUCTION	39.6 mons?
3		
4	RFQ FOR PRELIMINARY TREATMENT PLANT ENGINEERING	3.05 mons
5	PREPARE RFQ TO BIDDERS/BIDDERS PREPARE PROPOSALS/ EVALUATE PROPOSALS	3 mons
6	SELECT BIDDERS TO PERFORM PRELIMINARY ENGINEERING	0 mons
7		
8	PERMITTING	34.05 mons
9	PERMIT TREATMENT PLANT SITE	8 mons
10	MISCELLANEOUS PERMITTING	26.05 mons
11		
12	PRELIMINARY PLANT ENGINEERING DESIGN (DBC BIDDERS)	6.05 mons
13	PERFORM PRELIMINARY PLANT ENGINEERING DESIGN	6 mons
14	PRELIMINARY ENGINEERING PROPOSAL TO CONSOL	1 day
15		
16	FINAL PLANT DESIGN AND CONSTSTRUCTION (DBC)	27.05 mons
17	FINALIZE PROCESS DESIGN, EQUIPMENT AND CONSTRUCTION PROCURMENT	4 mons
18	START TREATMENT PLANT CONSTRUCTION	0.05 mons
19	PLANT CONSTRUCTION	19.75 mons
20	PLANT MECHANICAL COMPLETION	1 day
21	PLANT COMMISSIONING	4 mons
22	FINAL PLANT COMPLETION & TURN OVER TO CONSOL	0 days
23		
24		
25	WATER CONVEYANCE SYSTEMS (PIPELINES & PUMP STATIONS)	31.8 mons?
26	PIPELINE PRELIMINARY / FINAL ENGINEERING & CONSTRUCTION BIDDING	17.55 mons
27	PIPELINE RIGHT of WAY ACQUISITIONS	15.75 mons
28	PIPELINE PERMITTING	14.9 mons
29	START PIPELINE & PUMP STATION CONSTRUCTION	0.05 mons
30	PIPELINE CONSTRUCTION	14 mons?
31	COMPLETE PIPELINES & PUMP STATION CONSTRUCTION & COMMISSIONING	0 mons



Mon Watershed Meeting (8/25/11)
Date: Thu 8/25/11
Perin / Kutrovac

Task | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Milestone | Rolled Up Progress | Split | External Tasks | Project Summary | Group By Summary | Deadline

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Pipeline Information

- The pipeline will consist of approximately 34 miles of HDPE pipeline and 7 pump stations.
- The pipeline spans from the Pennsylvania border south to nearly Folsom West Virginia spanning nearly three counties.
- The pipeline system will be state of the art.
- The pipeline system will include a leak detection system that utilizes both pressure and flow to detect any potential leaks.

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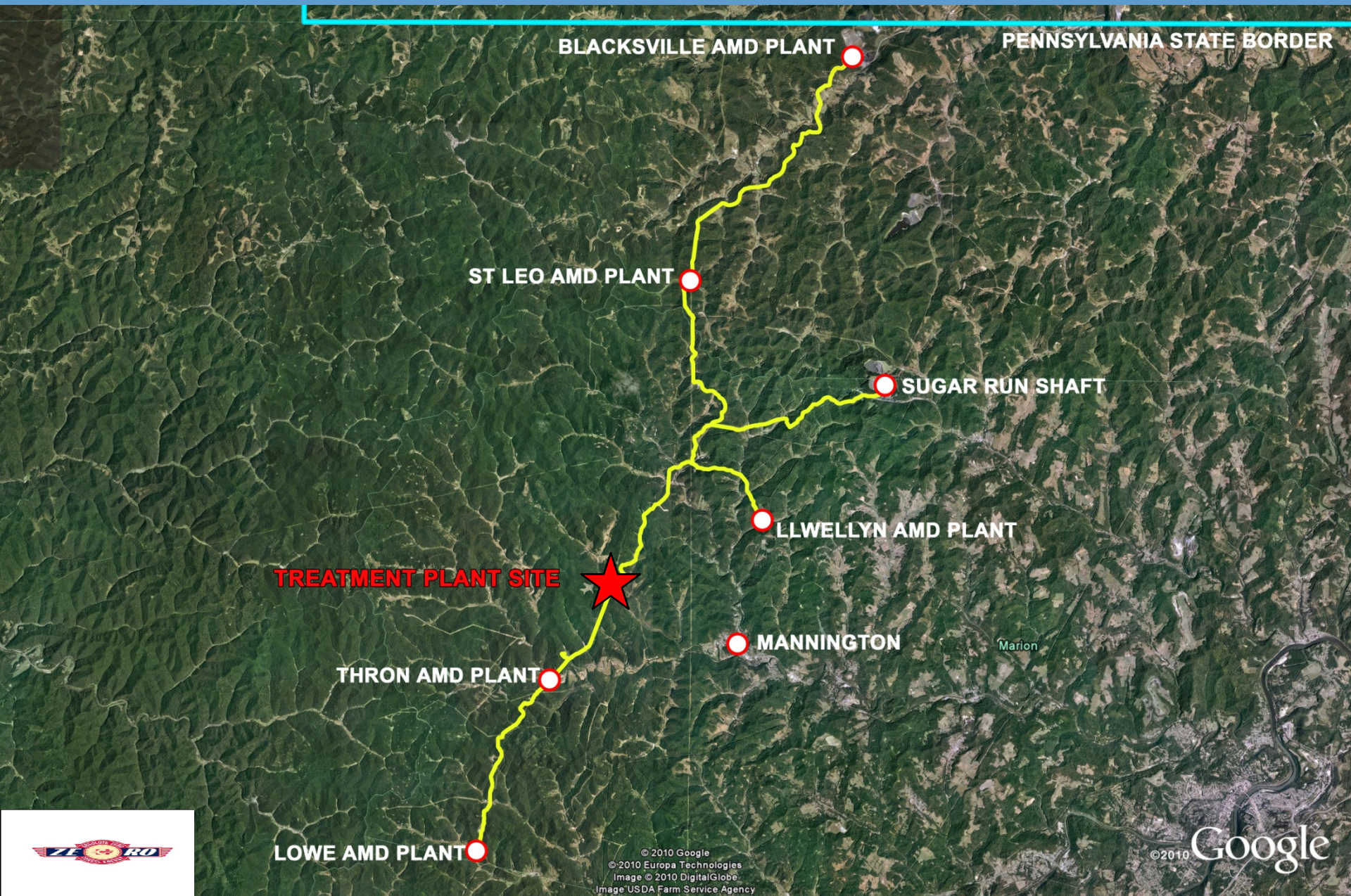
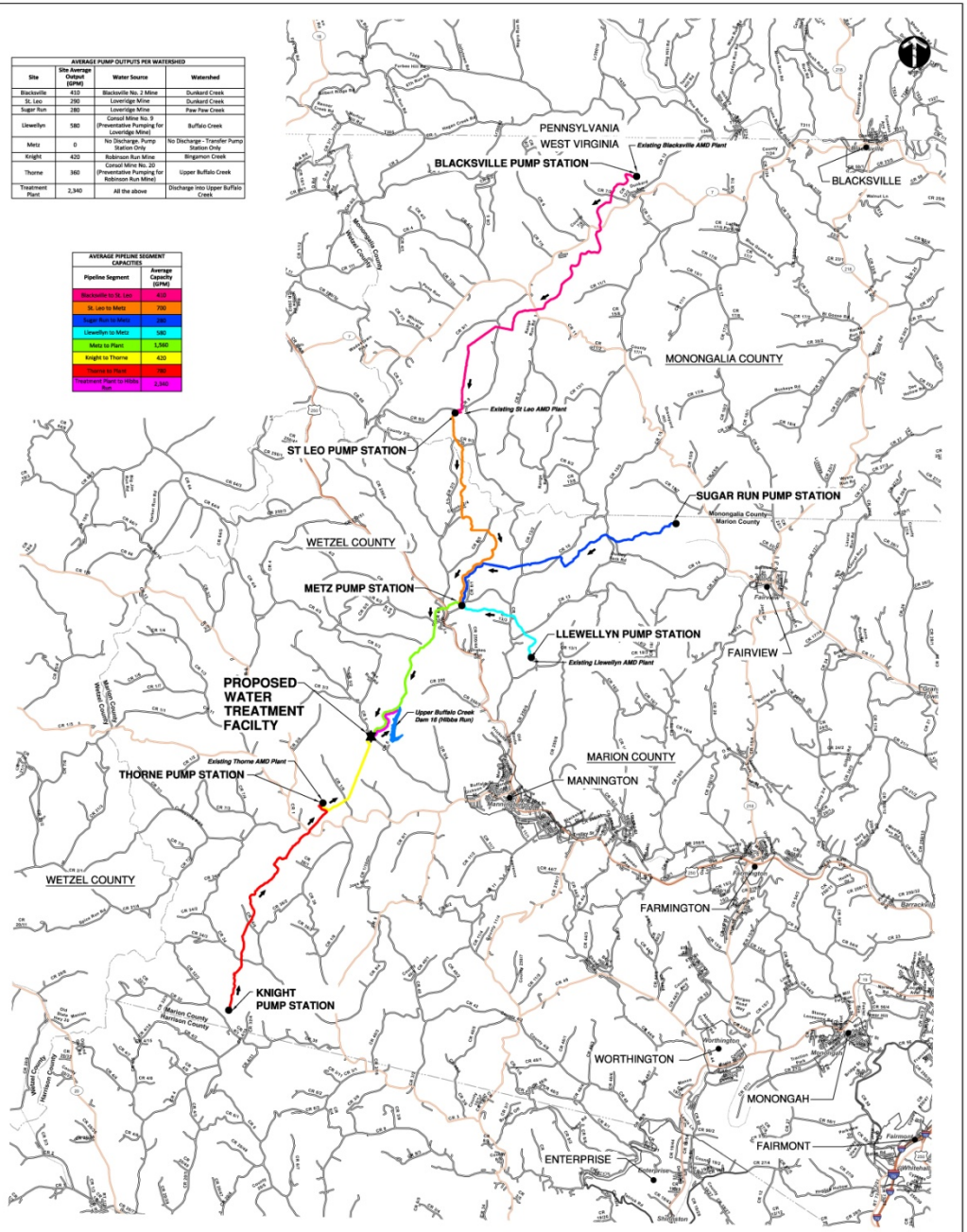
PROPOSED PIPELINE



AVERAGE PUMP OUTPUTS PER WATERSHED			
Site	Site Average Output (GPM)	Water Source	Watershed
Blacksville	410	Blacksville No. 2 Mine	Dunkard Creek
St. Leo	290	Loveridge Mine	Dunkard Creek
Sugar Run	280	Loveridge Mine	Paw Paw Creek
Llewellyn	580	Consol Mine No. 9 (Preventative Pumping for Loveridge Mine)	Buffalo Creek
Metz	0	No Discharge. Pump Station Only	No Discharge - Transfer Pump Station Only
Knight	420	Robinson Run Mine	Bingamon Creek
Thorne	360	Consol Mine No. 20 (Preventative Pumping for Robinson Run Mine)	Upper Buffalo Creek
Treatment Plant	2,340	All the above	Discharge into Upper Buffalo Creek

AVERAGE PIPELINE SEGMENT CAPACITIES	
Pipeline Segment	Average Capacity (GPM)
Blacksville to St. Leo	410
St. Leo to Metz	700
Sugar Run to Metz	280
Llewellyn to Metz	580
Metz to Plant	1,560
Knight to Thorne	420
Thorne to Plant	780
Treatment Plant to Hibbs Run	2,340



PLAN
SCALE: 1"=3000'

RESERVE COAL PROPERTIES COMPANY CNX Center 1000 CONSOL Energy Dr.	Drawn by: JSA Designed by: MBR Approved by: MBR Date: 8/2011	NORTHERN WEST VIRGINIA WATER TREATMENT FACILITY MARION COUNTY, WV WATER CONVEYANCE SYSTEMS	AS SHOWN G004B

CHESTER ENGINEERS

Pipeline Flythrough

Plant Information

- The treatment plant is designed for a maximum capacity of 3,500 gallons per minute (gpm).
- The average operating capacity is approximately 2,340 gpm.
- Once the water is purified in the plant it will either be loaded into tanker trucks at an onsite loading facility for commercial use or will be discharged into Upper Buffalo Creek Dam 16 (Hibbs Run)
- In July 2011 CONSOL received final approval from the State Conservation Service to discharge into Hibbs Run.

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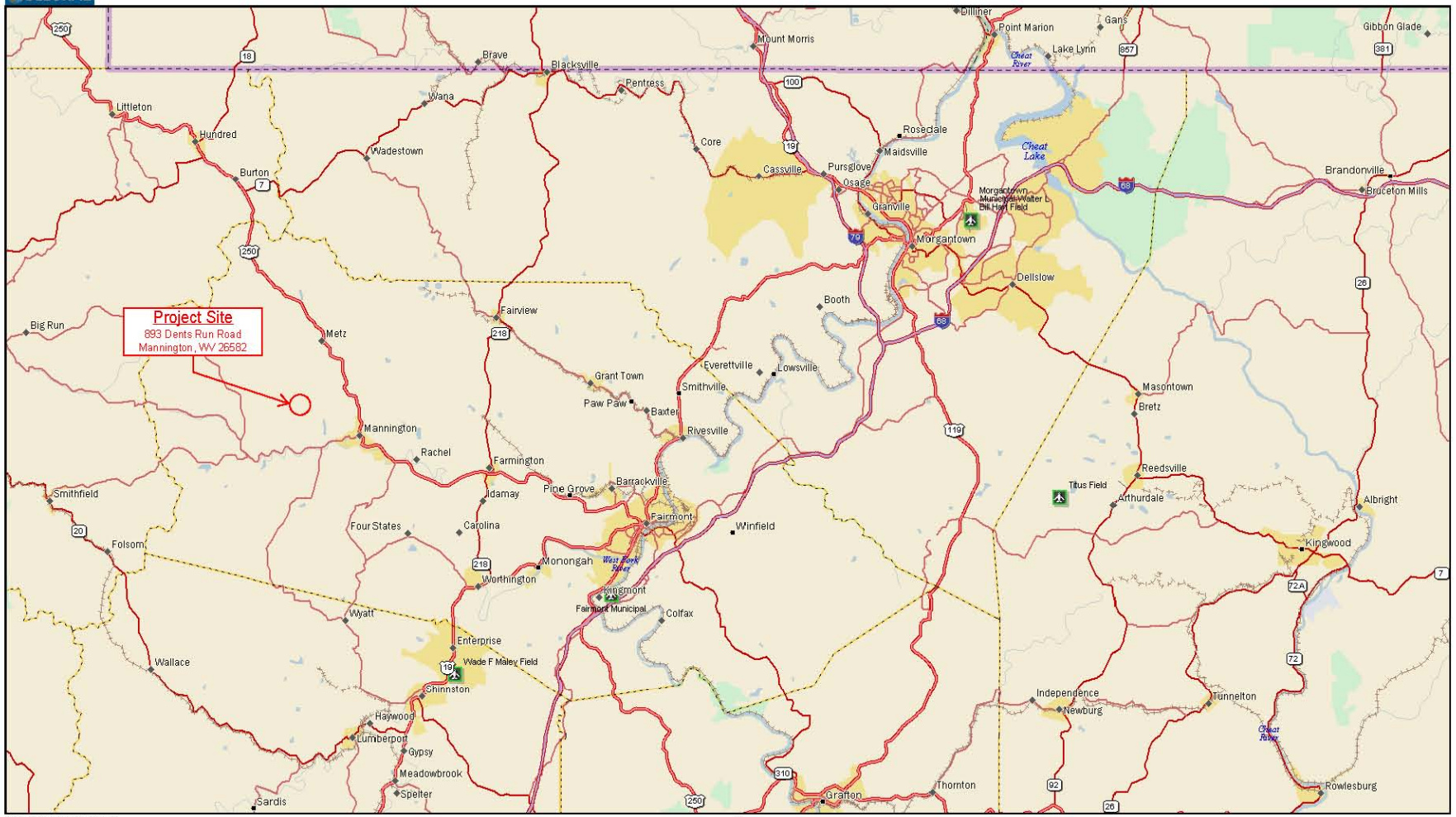
AERIAL PHOTOGRAPH CURRENT (2010)

SITE LOCATION PLAN



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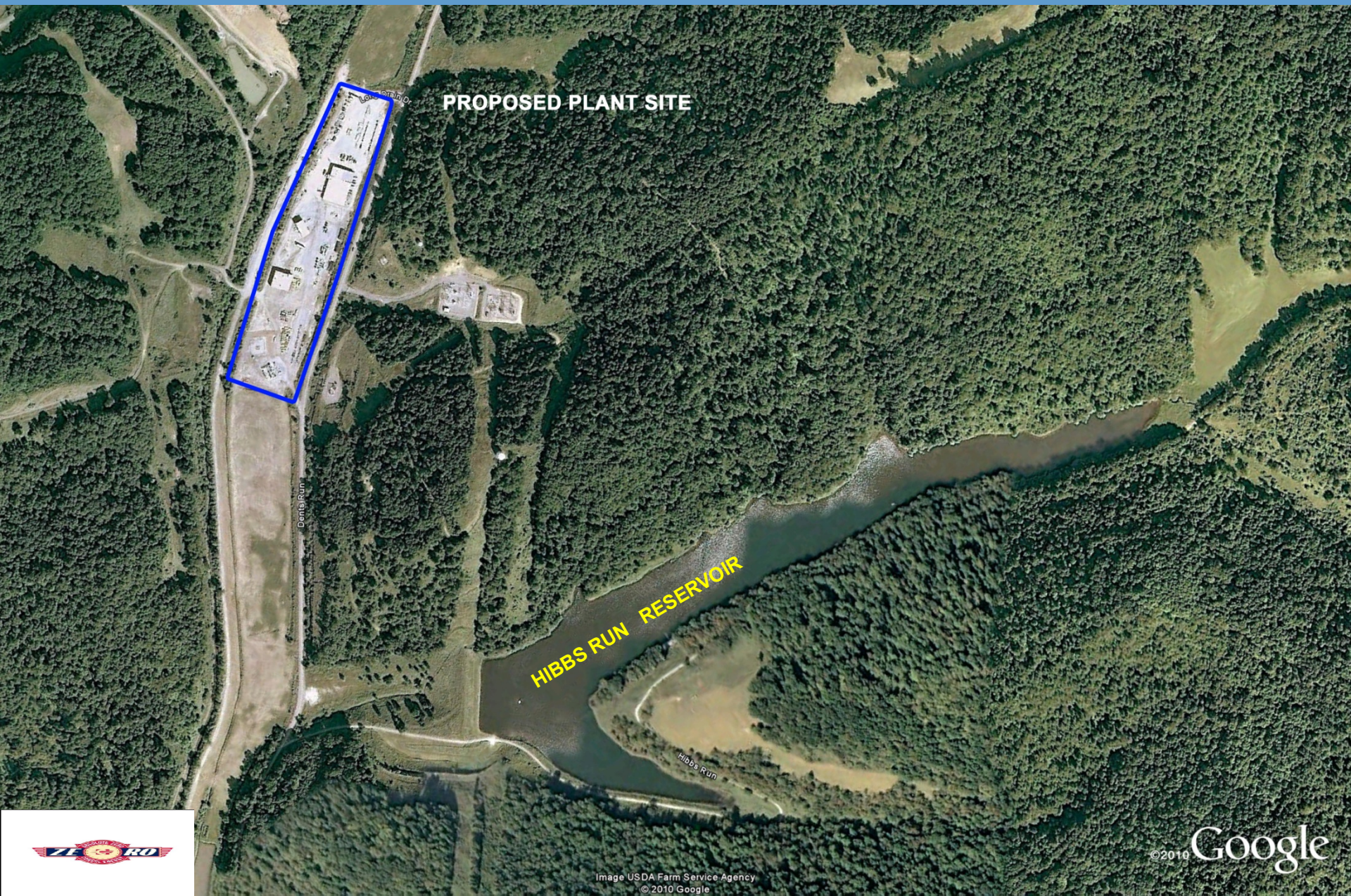
AERIAL PHOTOGRAPH CURRENT (2010)



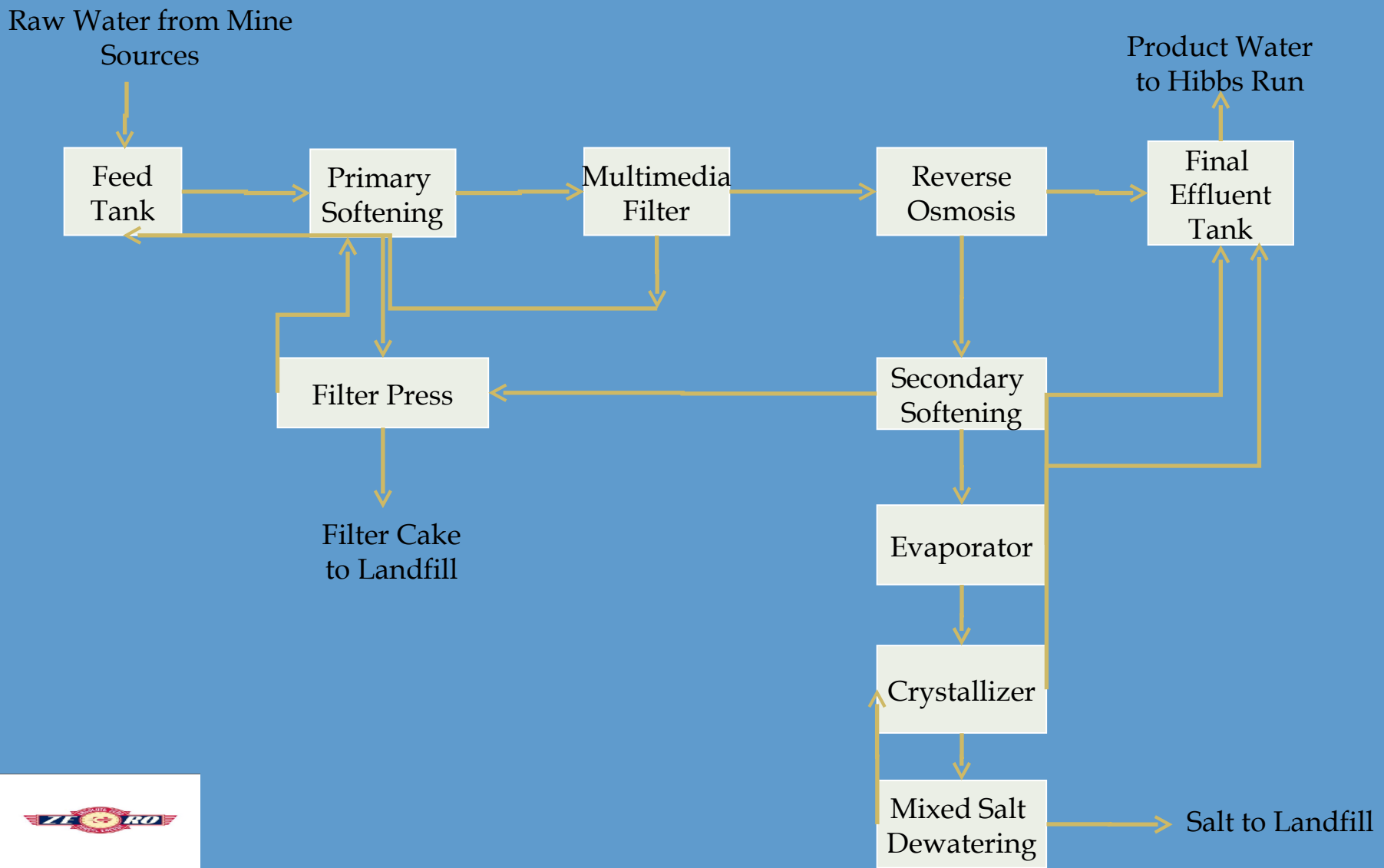
Plant Information

- Plant Technology
  - The plant will be a state of the art facility similar in design to CONSOL's existing treatment plant located in Buchanan County Virginia.
  - The advanced treatment plant will have six main components:
    - Softening
    - Multi Media Filtration
    - Reverse Osmosis
    - Evaporation
    - Crystallization
    - Filter Cake & Salt Dewatering

CONSOL ENERGY Buchanan Plant

CONSOL ENERGY

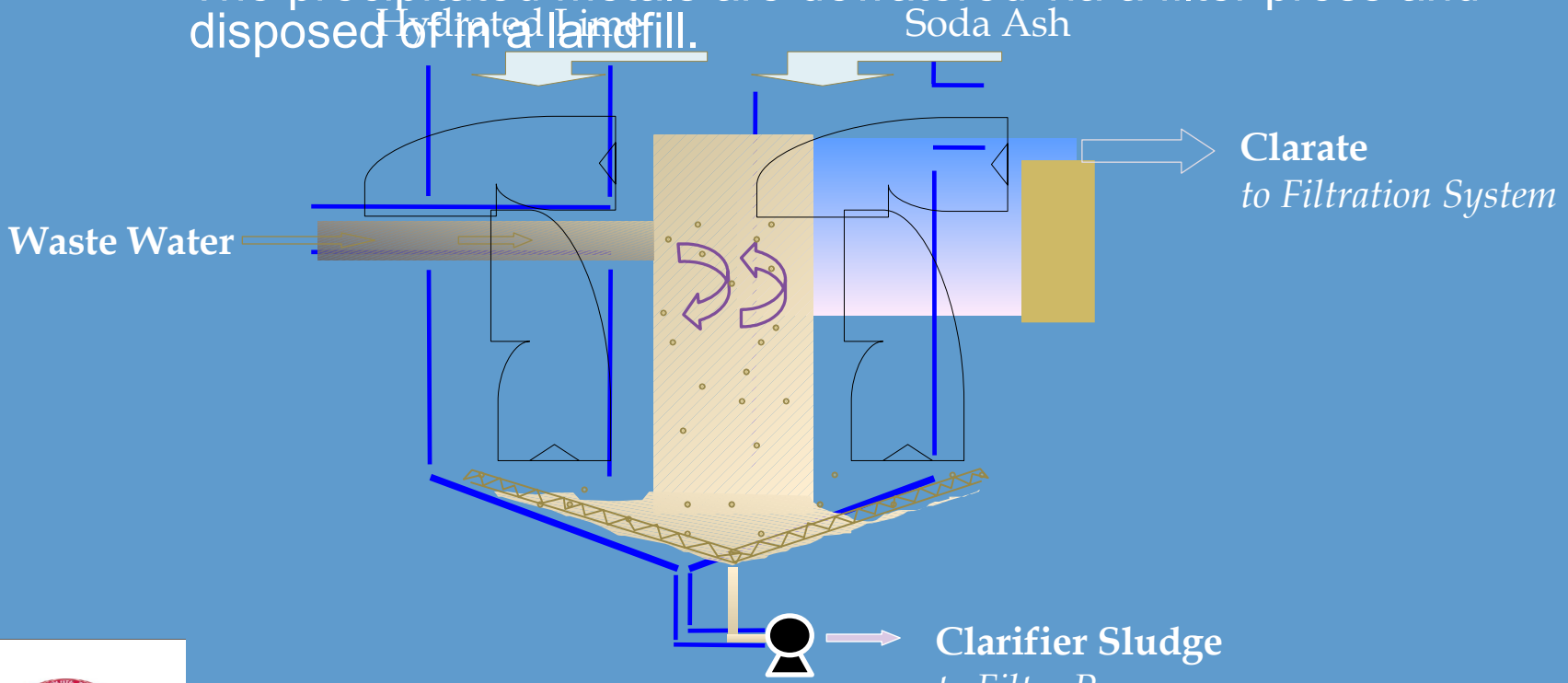
Plant Process Flow Diagram



Softening

- Process by which hydrated lime and soda ash are added to precipitate heavy metals mainly Iron, Calcium, and Magnesium.

- The precipitated metals are dewatered via a filter press and disposed of in a landfill.



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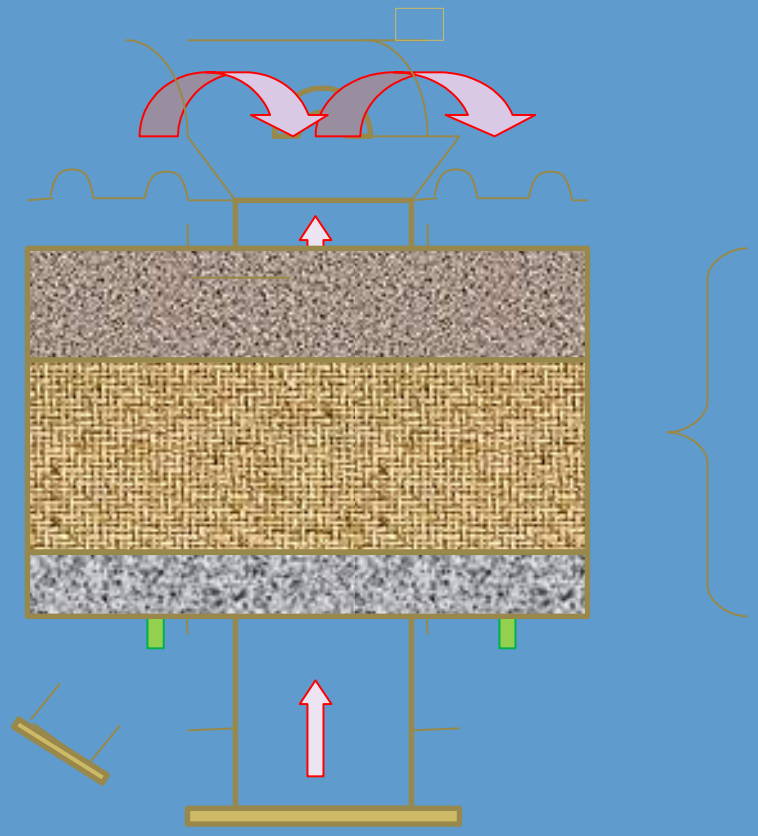
Softening

Multi Media Filters

- Process by which water flows through media to remove any remaining suspended solids



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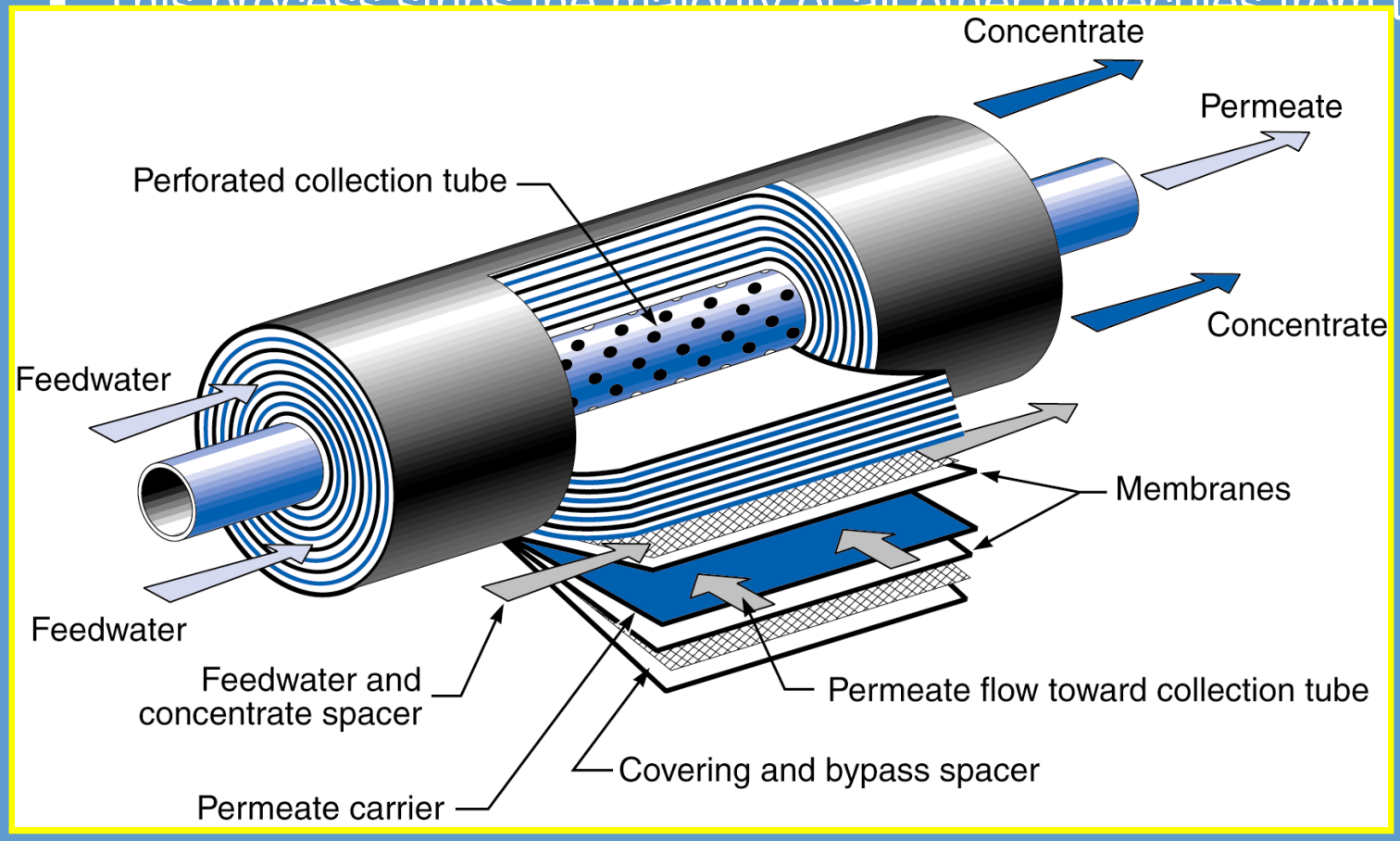
Multi Media Filters

Reverse Osmosis

- Process by which water is forced through a very fine filter under high pressure to overcome the natural osmotic pressure of water.
- This process strips the majority of all other molecules from the



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Reverse Osmosis

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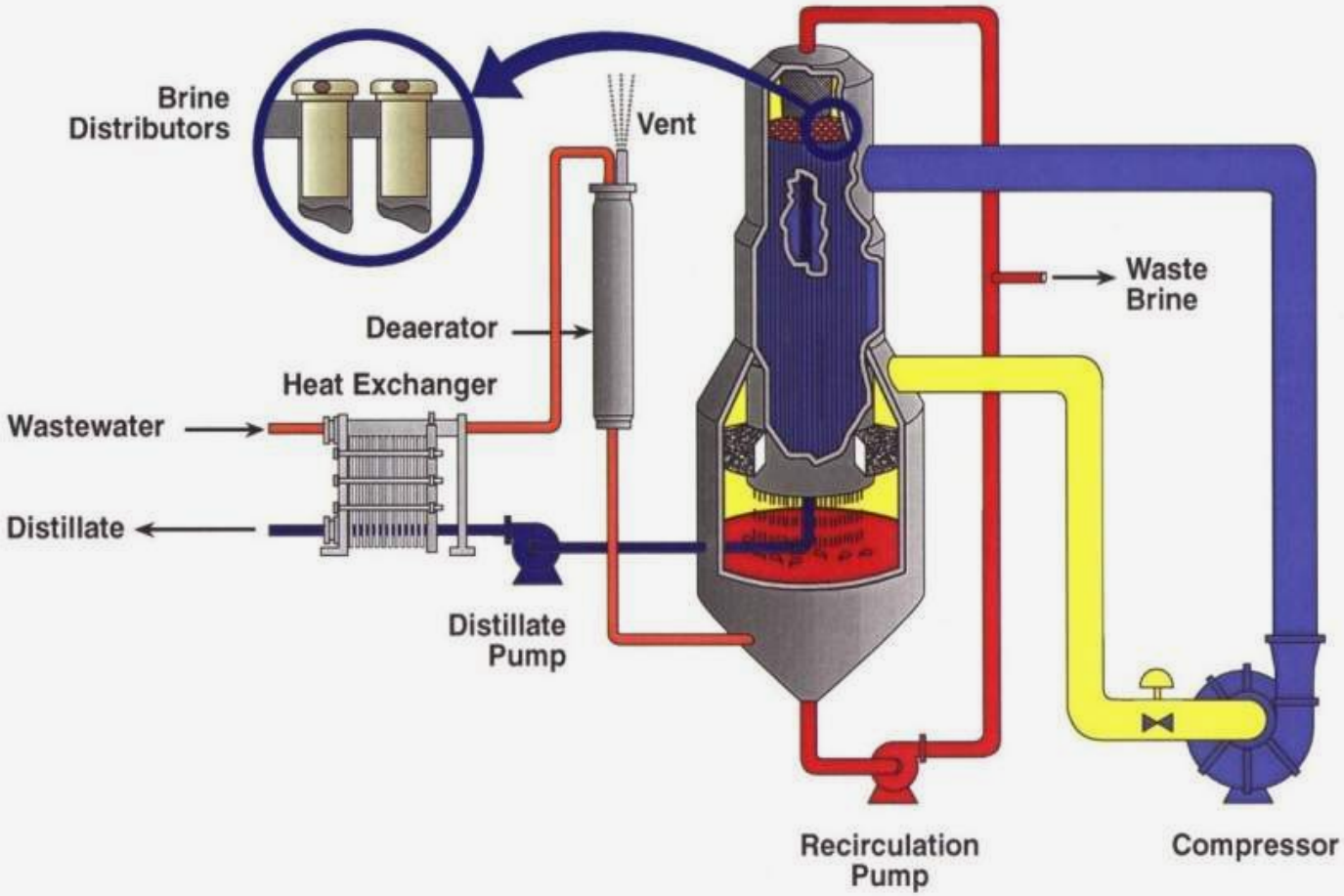
Evaporation

- Process by which the reject from reverse osmosis process is evaporated via mechanical vapor recompression to boil the water creating a clean distillate and a concentrated brine.



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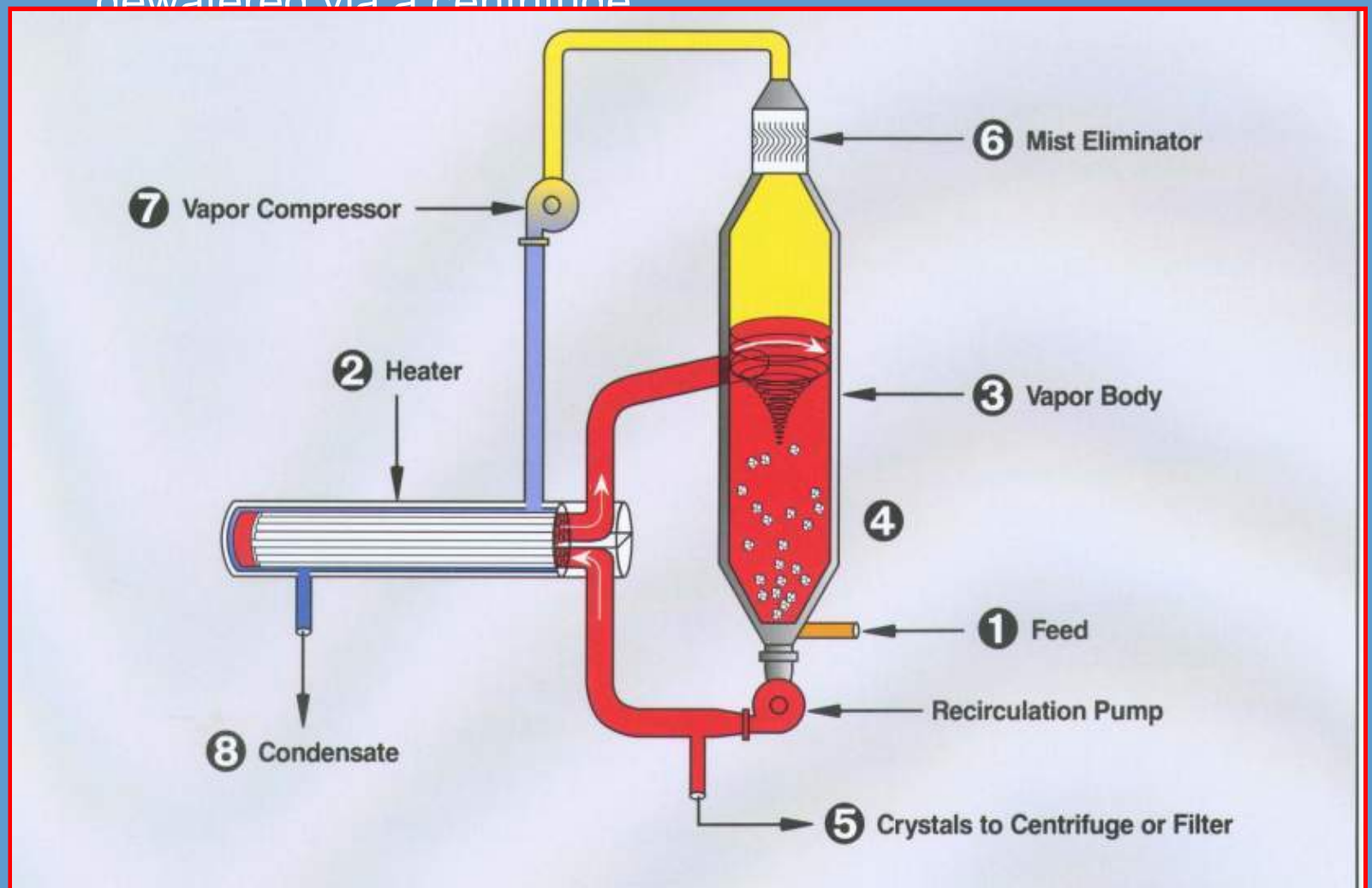
Crystallization

- Further concentrates the brine produced by the evaporator to create a highly concentrated crystal laden brine that can be dewatered via a centrifuge



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Evaporator & Crystallizer

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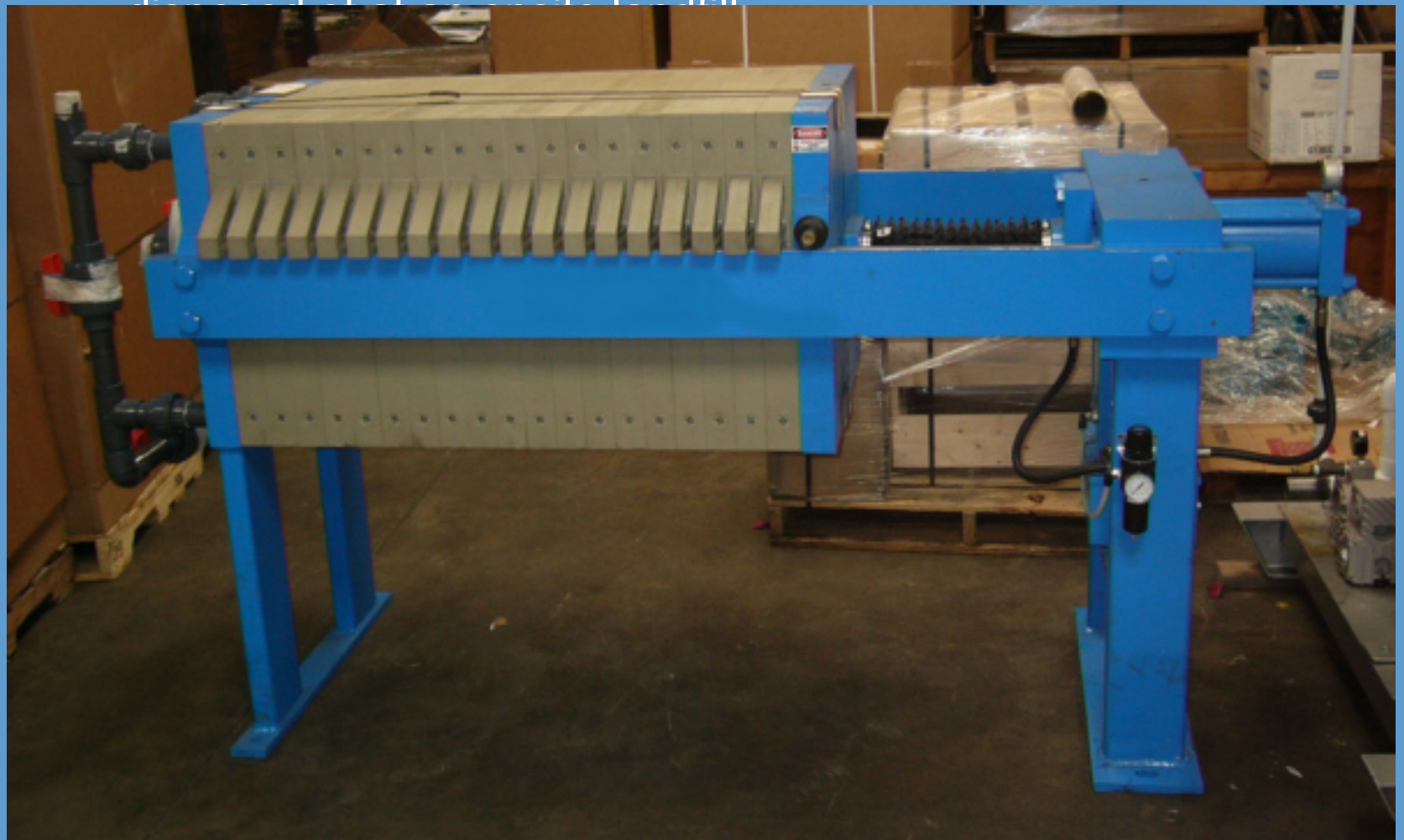
Filter Cake Dewatering

- The filter cake from the softening process is dewatered via a plate and fame filter press. The dewatering cake will be



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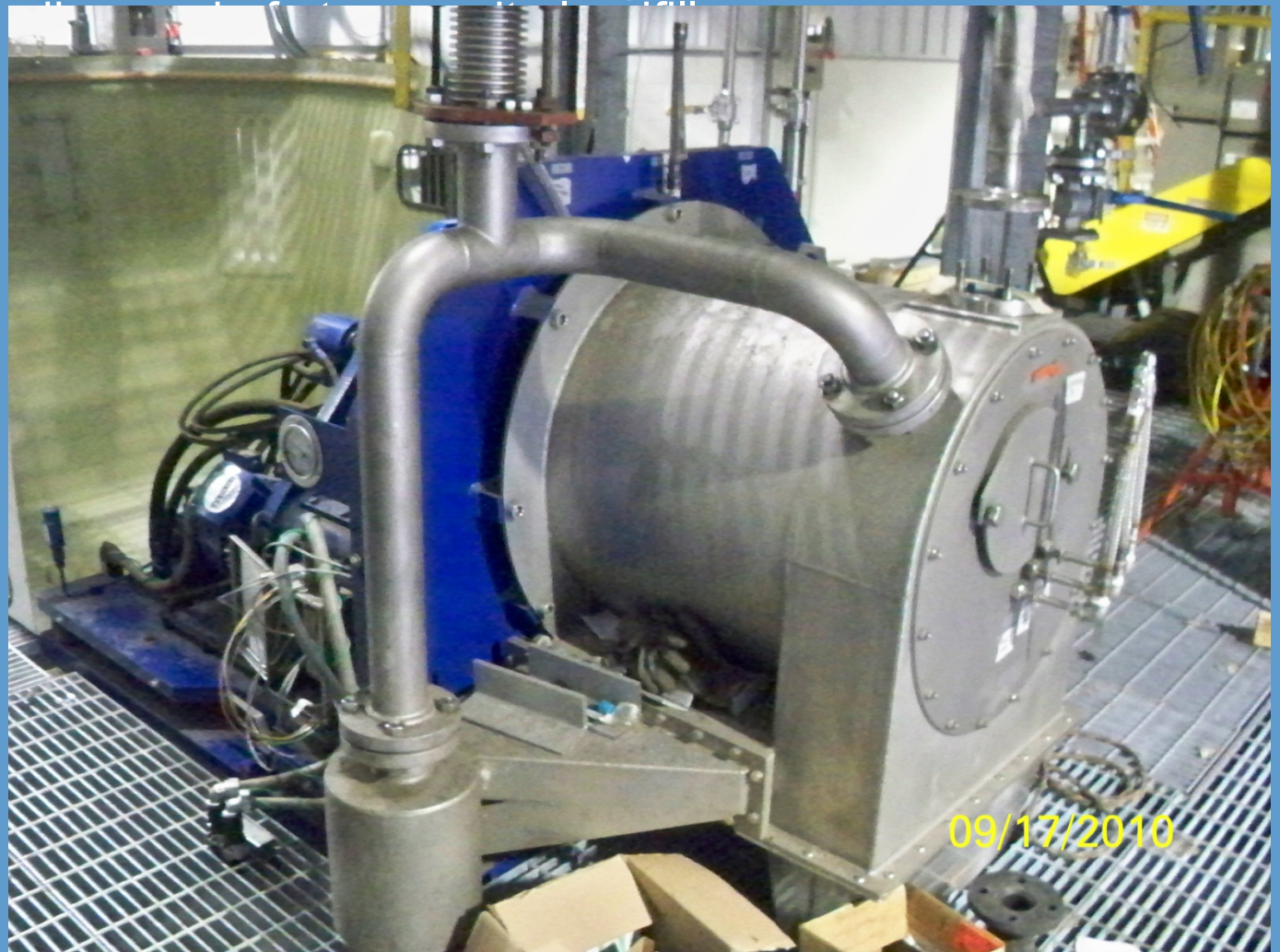
Mixed Salt Dewatering

- The mixed salt from the Evaporation/Crystallization process will be dewatered via a centrifuge. The dewatered salt will be



Onsite Landfill

- At average flow conditions the plant will generate approximately 90 tons/day of filter cake and +/-160 tons/day of mixed salt.
- The filter cake and mixed salt wastes will be disposed at an onsite industrial landfill.
- The landfill will consist of a double HDPE liner design.
- All leachate generated in the landfill will be treated at the treatment plant. This creates a totally closed system.

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Dewatered Filter Cake

Dewatered Mixed Salt

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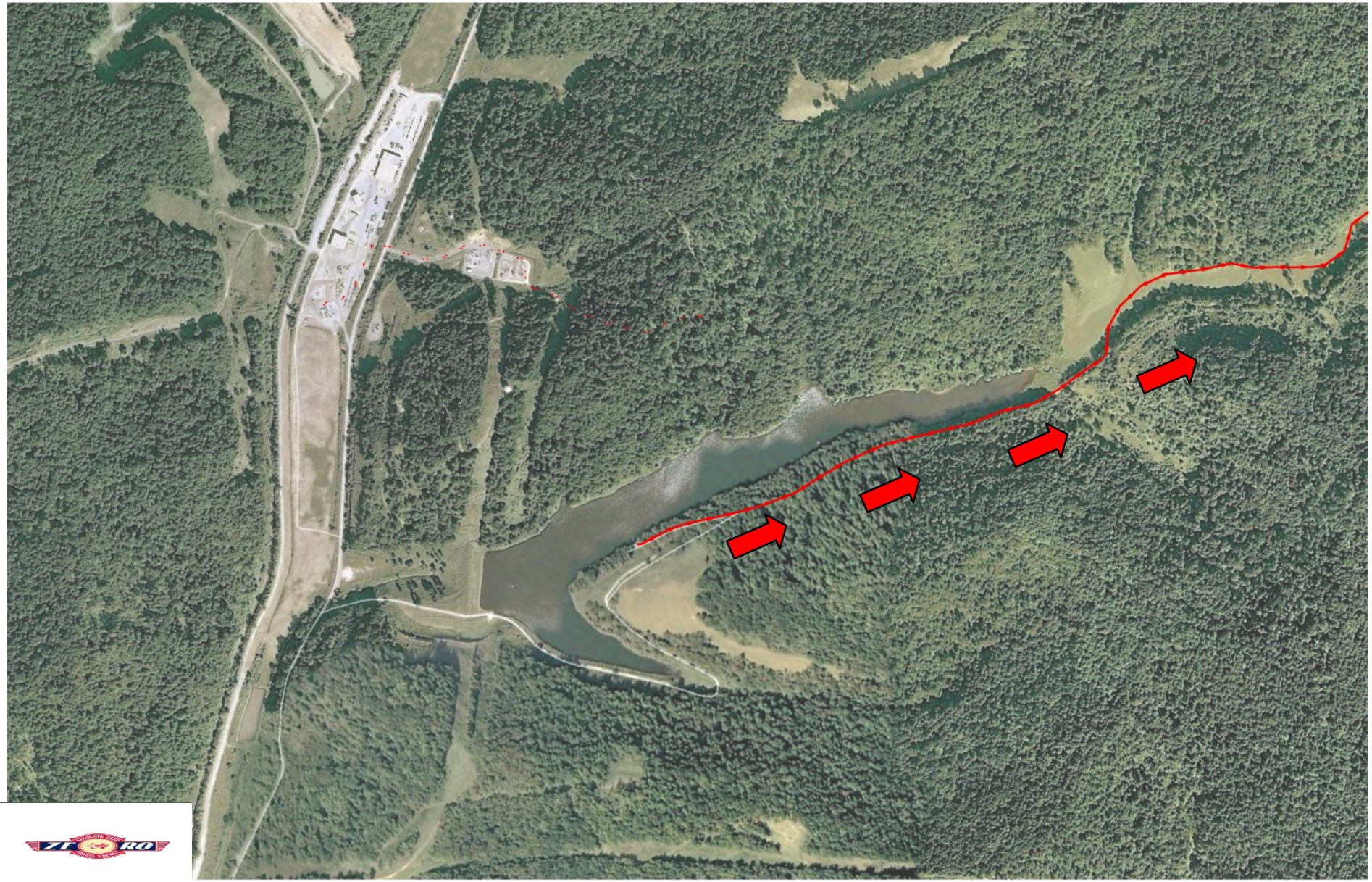
EXISTING CONDITIONS



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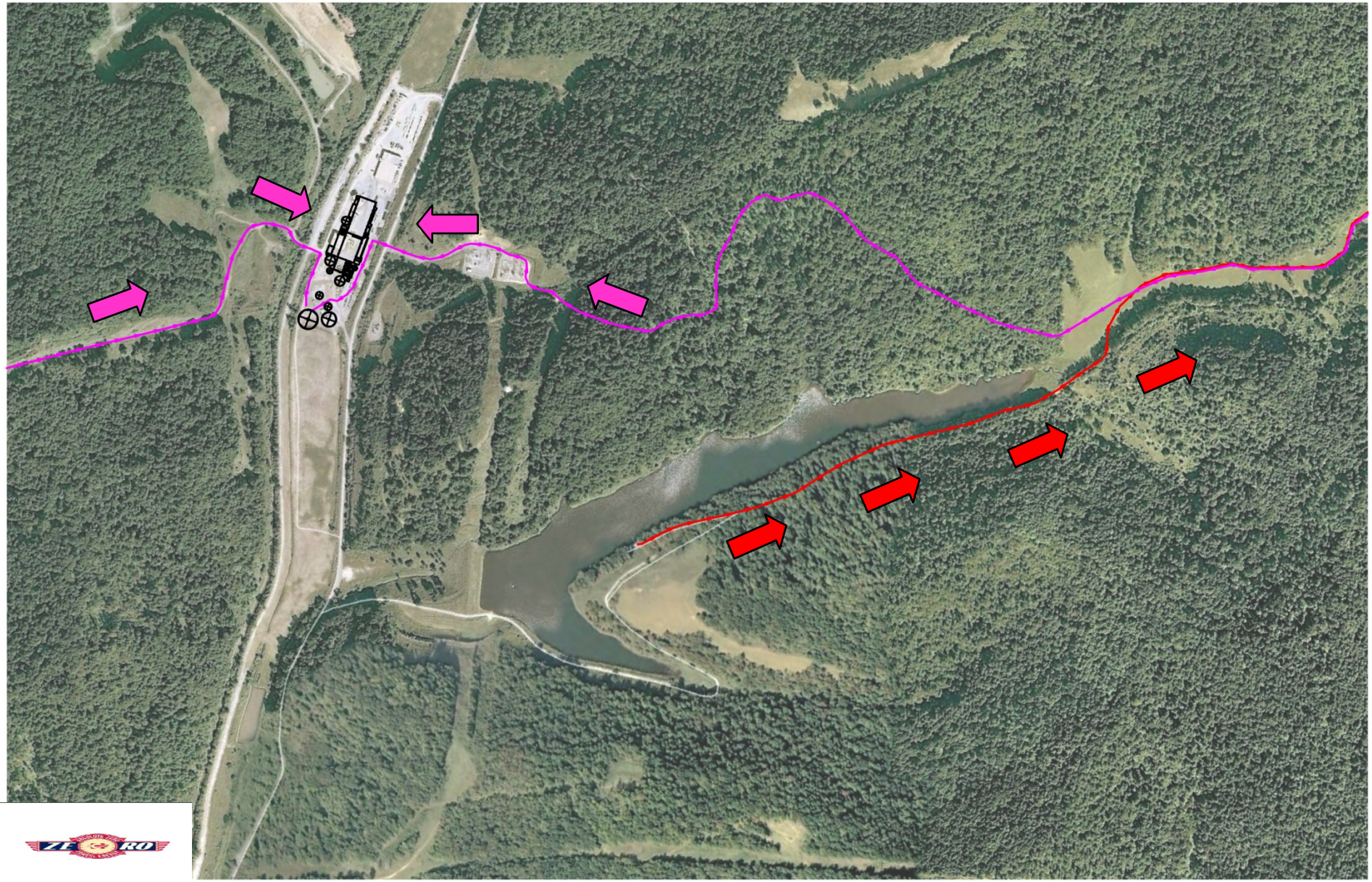
PLANT & FEED WATER PIPELINES



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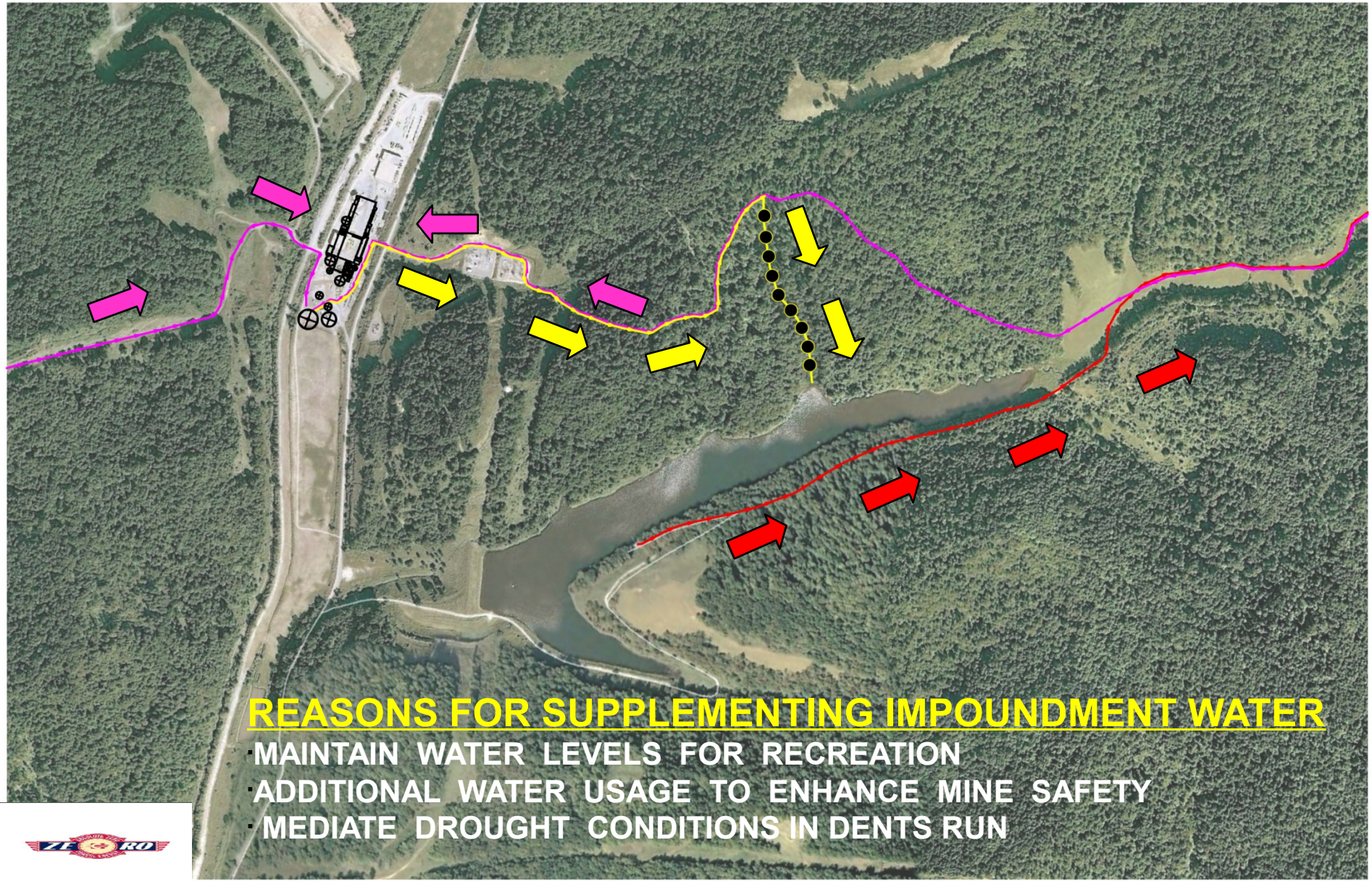
PROPOSED TREATED WATER PIPELINE



REASONS FOR SUPPLEMENTING IMPOUNDMENT WATER

- MAINTAIN WATER LEVELS FOR RECREATION
- ADDITIONAL WATER USAGE TO ENHANCE MINE SAFETY
- MEDIATE DROUGHT CONDITIONS IN DENTS RUN

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WATER CHEMISTRY

Item	Existing Hibbs Run Quality	Expected Plant Product Water	EPA Drinking Water Standards
pH	7.48	7-7.5	6.5-8.5
Total Dissolved Solids (mg/L)	281.88	200-250	500.00
Total Iron (mg/L)	0.45	<0.1	0.30
Total Manganese (mg/L)	0.05	0.01-0.05	0.05
Total Aluminum (mg/L)	0.14	0.05-0.1	0.05-0.2
Dissolved Al (mg/L)	0.10	0.05-0.1	N/A
Sulfates (mg/L)	43.25	40-80	250.00
Chloride (mg/L)	7.50	22-50	250.00
Selenium (mg/L)	0.00	0.00	0.05

ZERO

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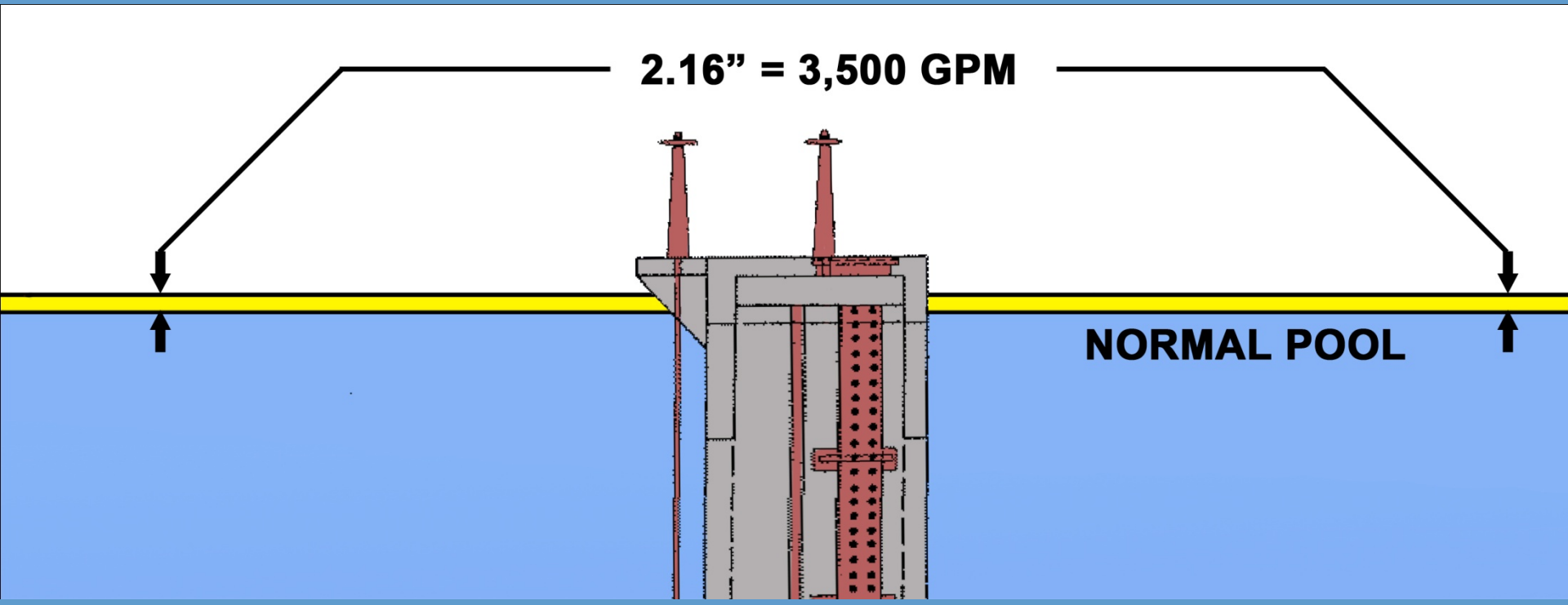

RISER - NORMAL POOL + MAX PLANT INFLOW

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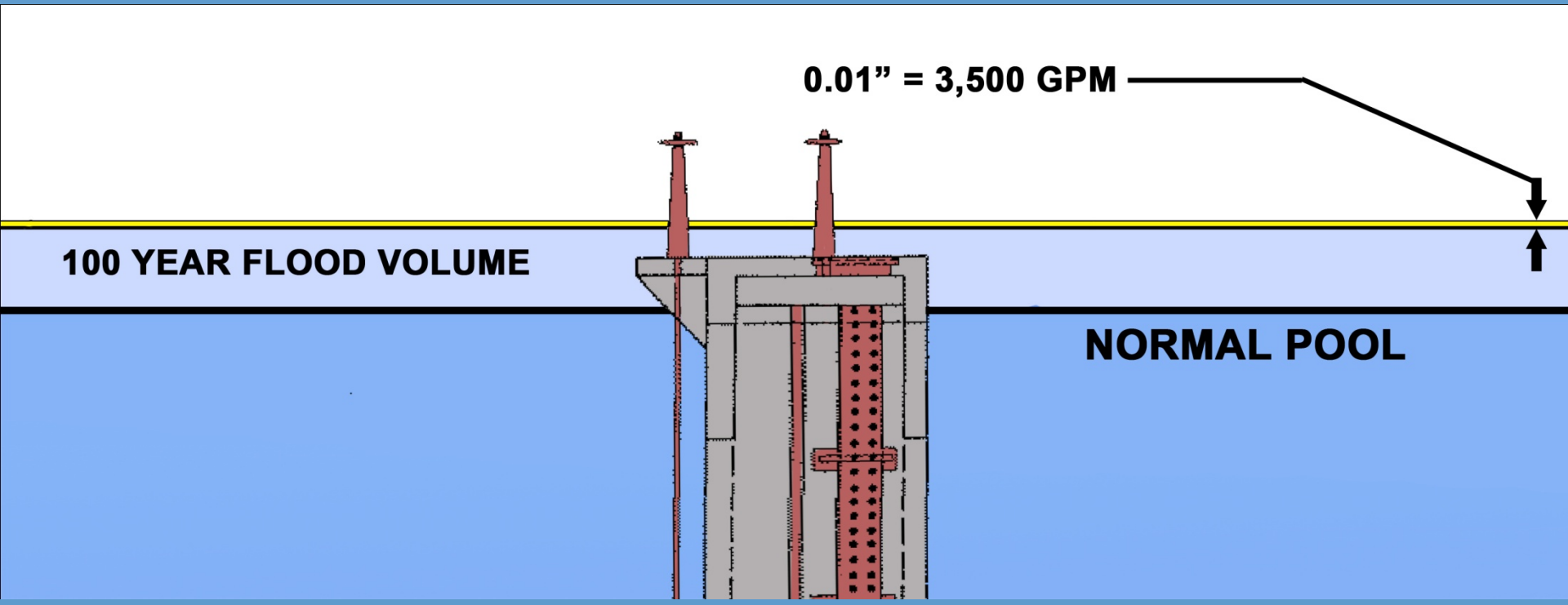

RISER - 100 YEAR + MAX PLANT INFLOW

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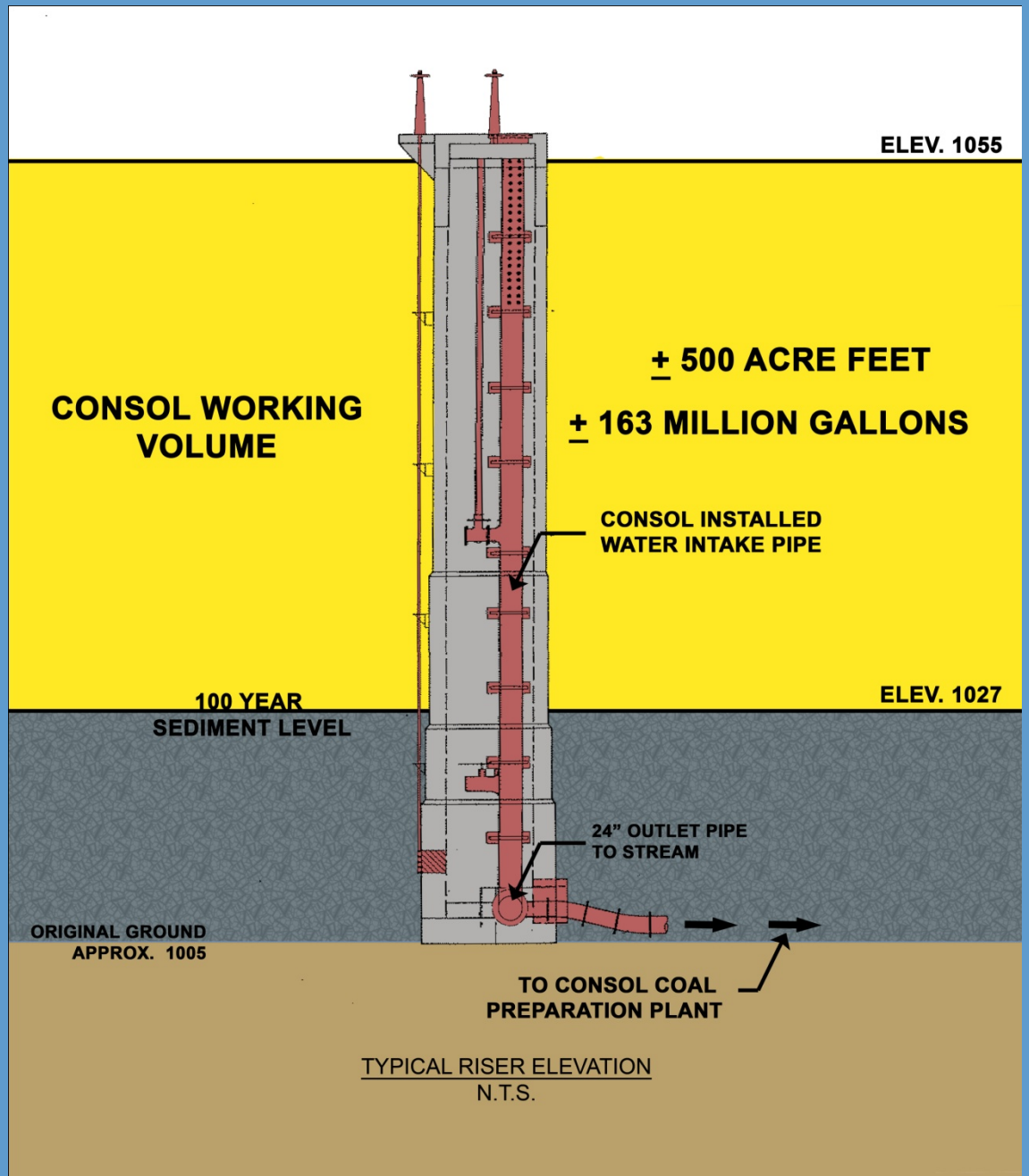

TYPICAL RISER ELEVATION
N.T.S.

Regional Benefits

- Economical Stimulation
  - Large capital investment in region
    - Plant Cost $110 million
    - Pipeline Cost $55 million
    - Landfill Cost $20 million
- Job Creation
  - Approximately 200-250 construction jobs for approximately 2 years.
  - Approximately 30-40 permanent jobs.
- nvironmental Protection

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AERIAL PHOTOGRAPH CURRENT (2010)