



Inland Empire Paper Company Proposed NPDES Discharge Permit

Pat Hallinan

Inland Empire Paper Company (IEP)

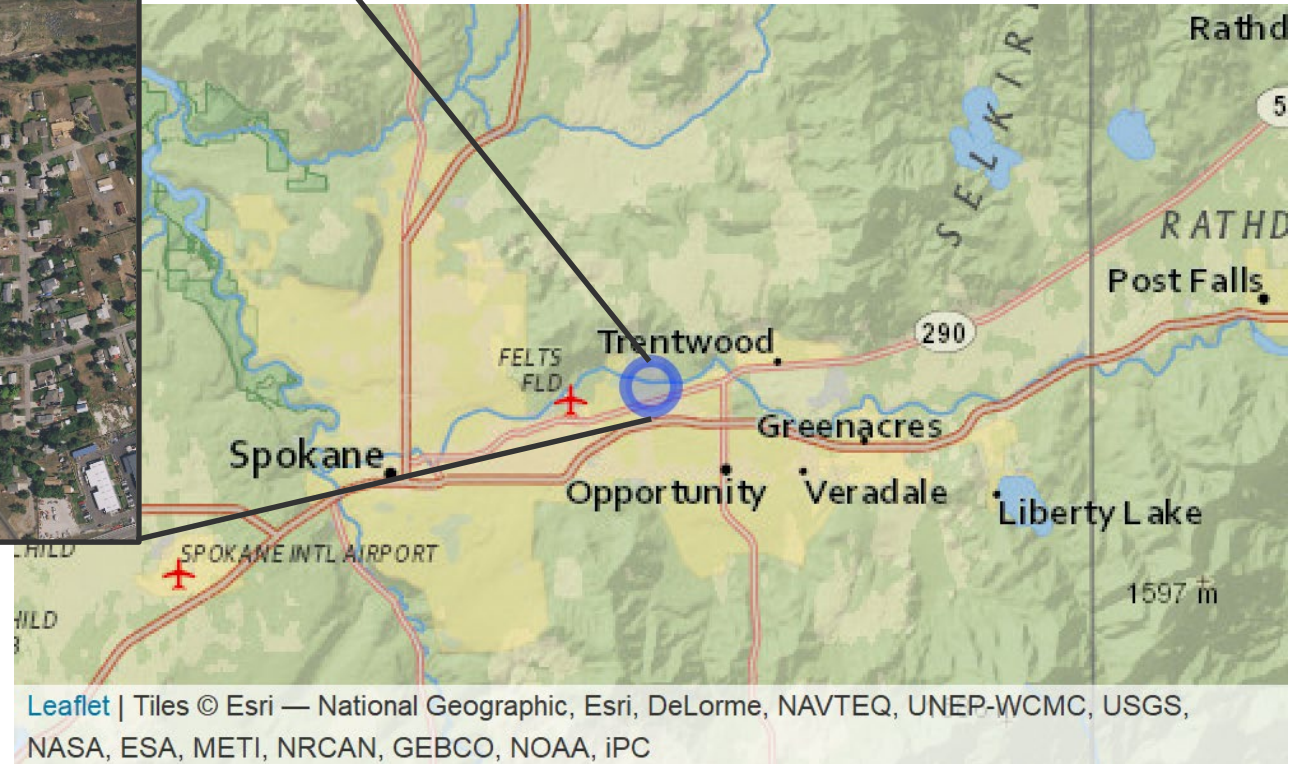
Pulp and Newsprint Paper Mill

- Pulp production includes thermo-mechanical pulping (TMP) of wood chips and de-inking of recycled newspapers, magazines, office paper and other paper stock (corrugated cardboard, etc.)

Wastewater Discharge

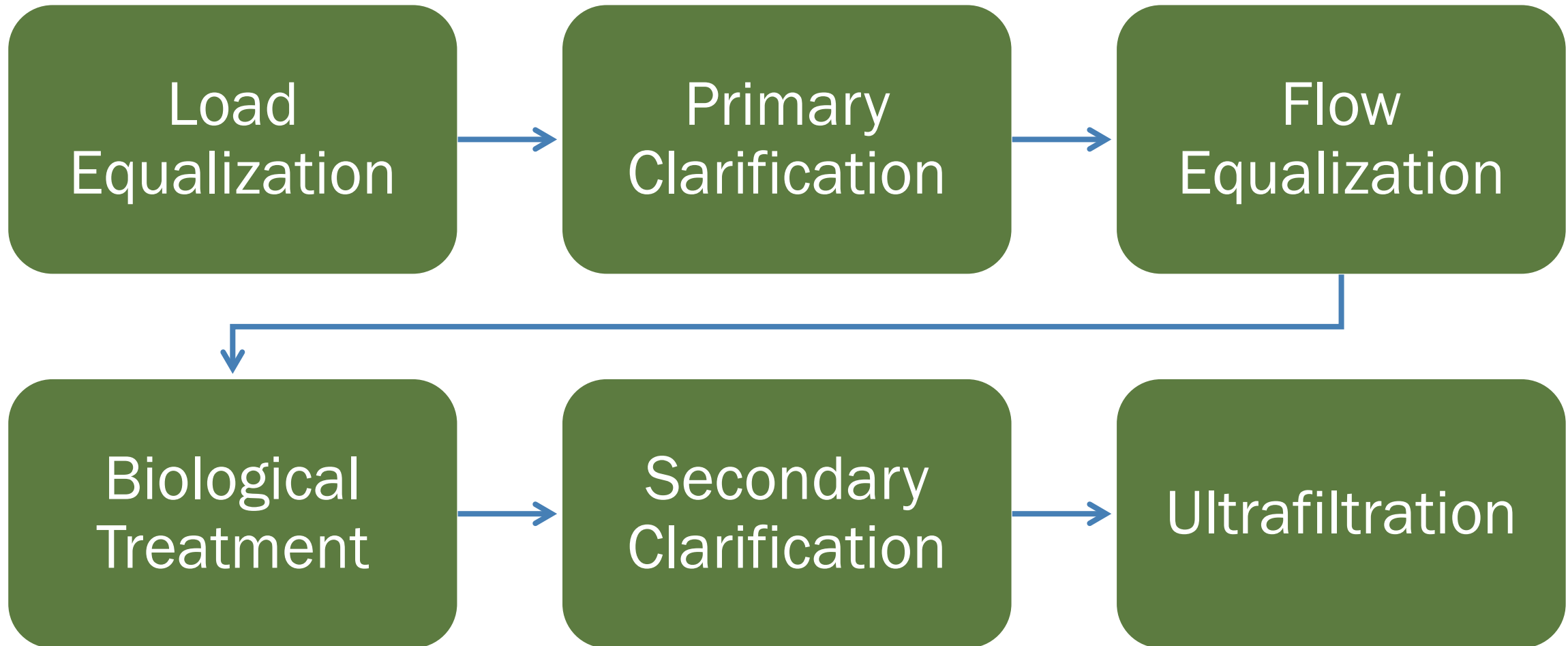
- Average discharge of 3.0 million gallons per day (mgd) of treated process water
- Average discharge of 3.6 mgd of once through, non-contact cooling water

Site Location



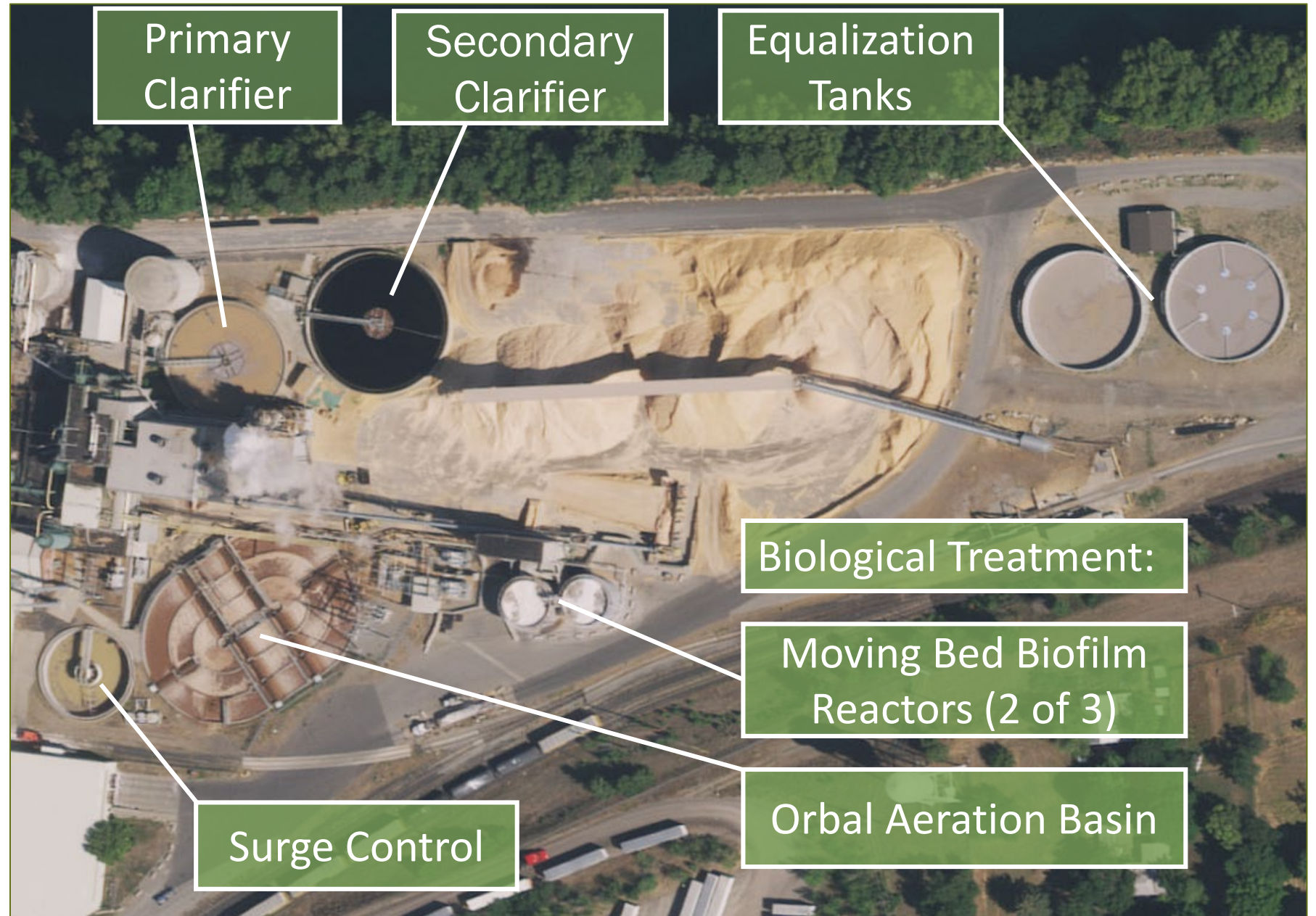
Leaflet | Tiles © Esri — National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, IPC

Wastewater Treatment System Overview

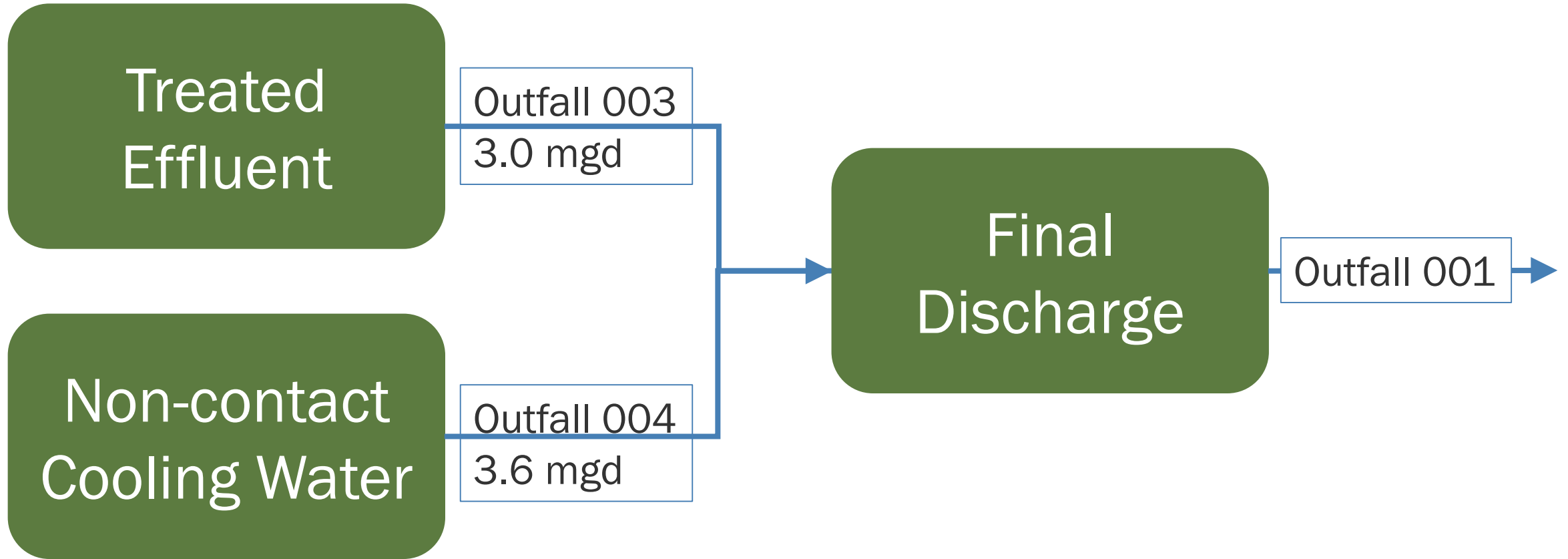


Treatment Overview

Ultrafiltration
(not shown)



Discharge Overview



Effluent Limitations (Limits)

- Technology Based
 - Federal Effluent Guidelines
 - Case-by-case determinations
- Water Quality Based
 - Evaluate Critical Effluent and Receiving Water Conditions (Reasonable Potential Determination)
 - Water Body Impairments
 - Total Maximum Daily Load (TMDL) Requirements

Water Quality Assessment - Category 5

PARAMETER_NAME	CATEGORY	Status	WATERBODY_NAME	MEDIUM_NAME
Polychlorinated Biphenyls (PCBs)	5	Current	SPOKANE RIVER	Tissue
Polychlorinated Biphenyls (PCBs)	5	Draft	SPOKANE RIVER	Tissue
Methylmercury	5	Draft	SPOKANE RIVER	Tissue
Polybrominated Diphenyl Ethers (PBDEs)	5	Draft	SPOKANE RIVER	Tissue

Applicable Total Maximum Daily Loads (TMDLs)

PARAMETER_NAMES

TMDL

Carboneaous Biochemical Oxygen Demand (CBOD₅)
Total Phosphorus
Ammonia

Spokane River and Lake Spokane Dissolved Oxygen (DO)
TMDL

Cadmium
Lead
Zinc

Spokane River Metals TMDL

Spokane River and Lake Spokane DO TMDL Requirements

10 year Compliance Schedule to meet final water quality based effluent limits

- TMDL allowed use of implementation tools to meet limits
- IEP requested additional time to meet CBOD₅ and total phosphorus limits to provide for continued system optimization and evaluation of implementation tools

Compliance Schedule Extensions under WAC 173-201A-510(e)

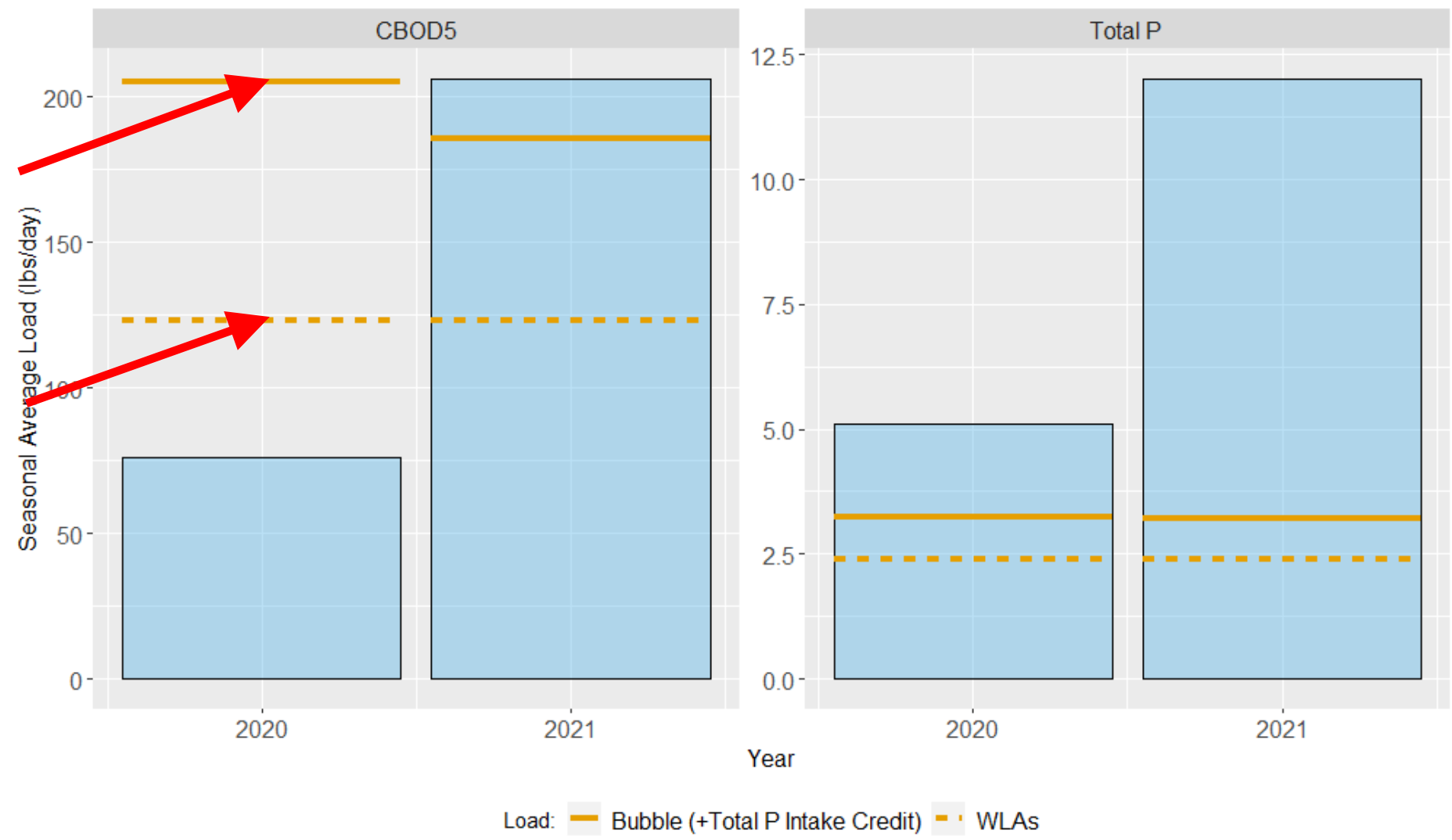
Ecology may authorize a compliance schedule longer than 10 years when an approved TMDL has established waste load allocations for permitted dischargers

- i. The permittee is **not able to meet its waste load allocation** in the TMDL solely by controlling and treating its own effluent;
- ii. The permittee **has made significant progress to reduce pollutant loading** during the term of the permit;
- iii. The permittee is **meeting all of its requirements under the TMDL** as soon as possible; and
- iv. Actions specified in the compliance schedule are **sufficient to achieve water quality standards as soon as possible**.



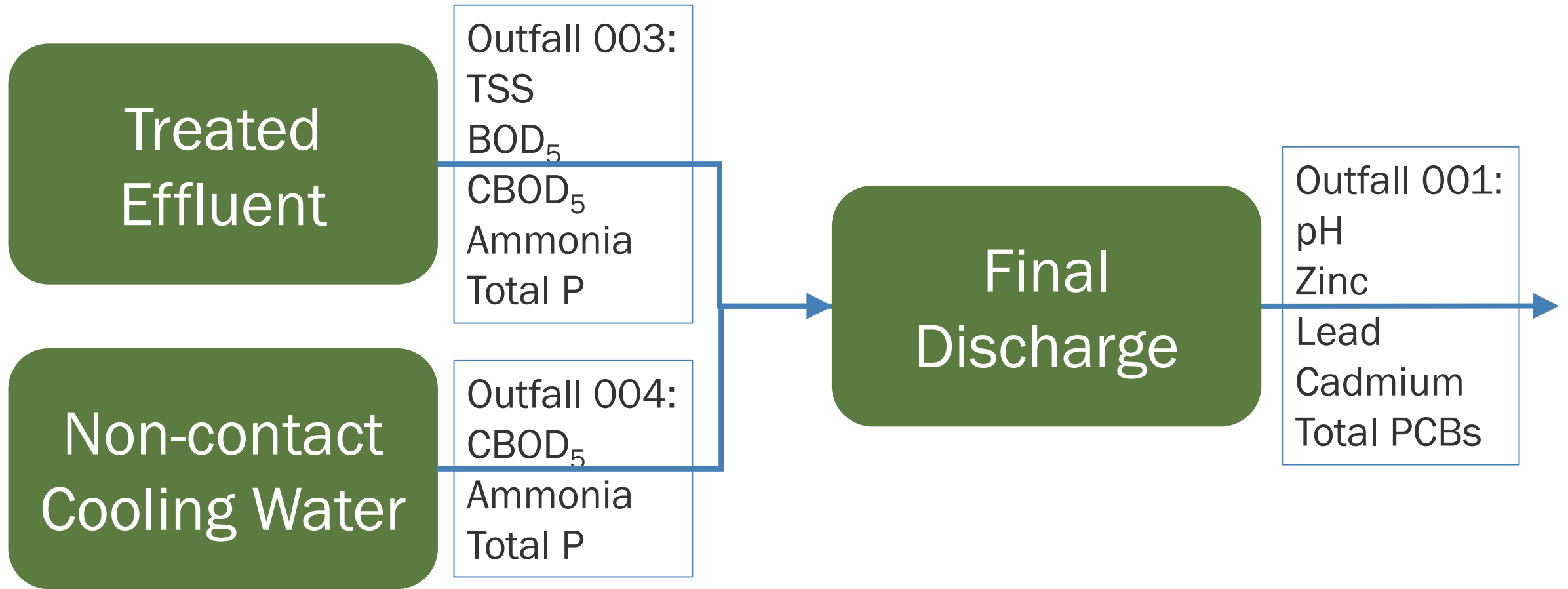
2020 & 2021:

CBOD₅ and Total P Seasonal Average Loadings



Proposed extension for 2022 – 2023 compliance seasons; compliance required by 2024 season

Compliance Point Monitoring Overview



Effluent Limits Overview

Year-Round

TSS, pH, Cadmium, Lead, Zinc, Total PCBs

February - October

Total P (bubble limit)

March - October

CBOD₅ (bubble limit), Ammonia

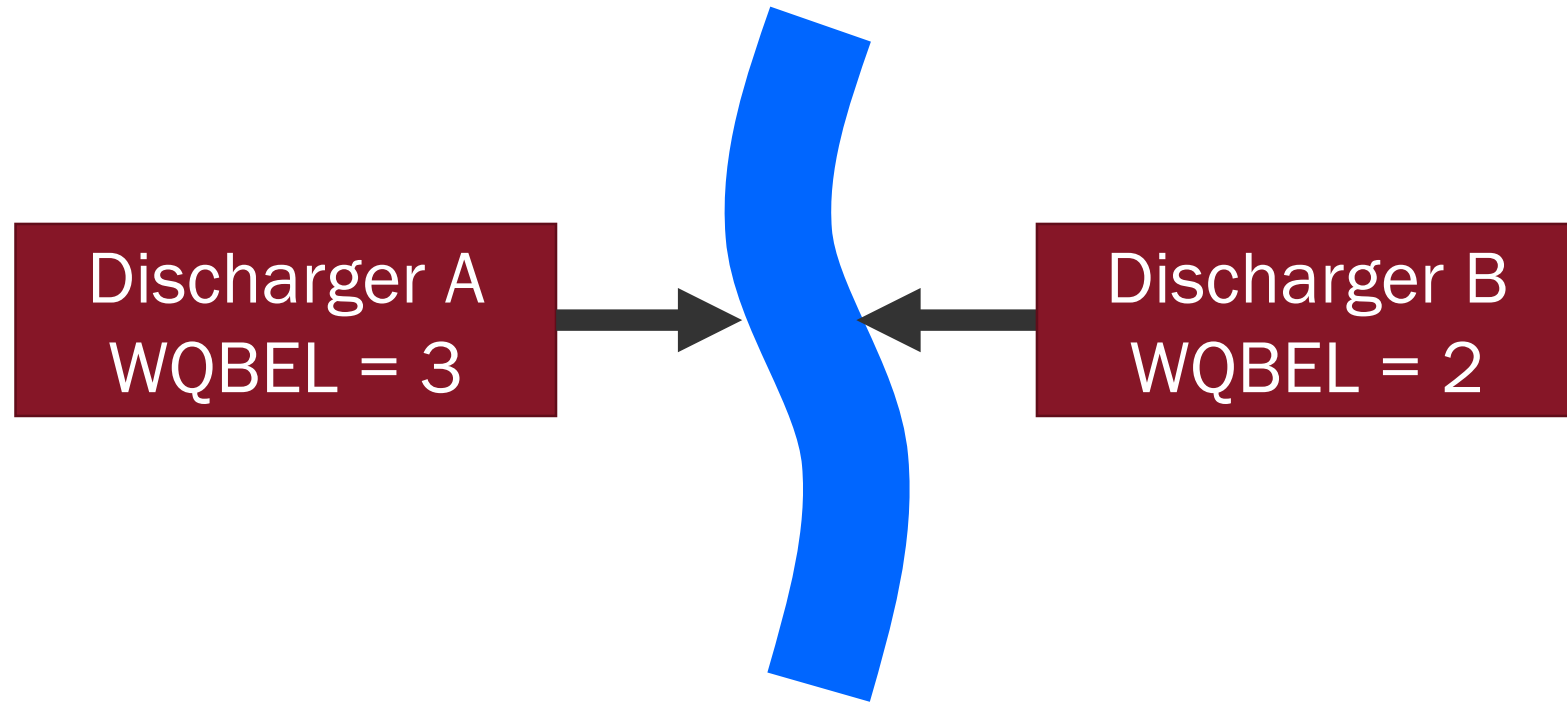
November - February

BOD₅

Performance Based
Water Quality Based



What is a Bubble Limit?

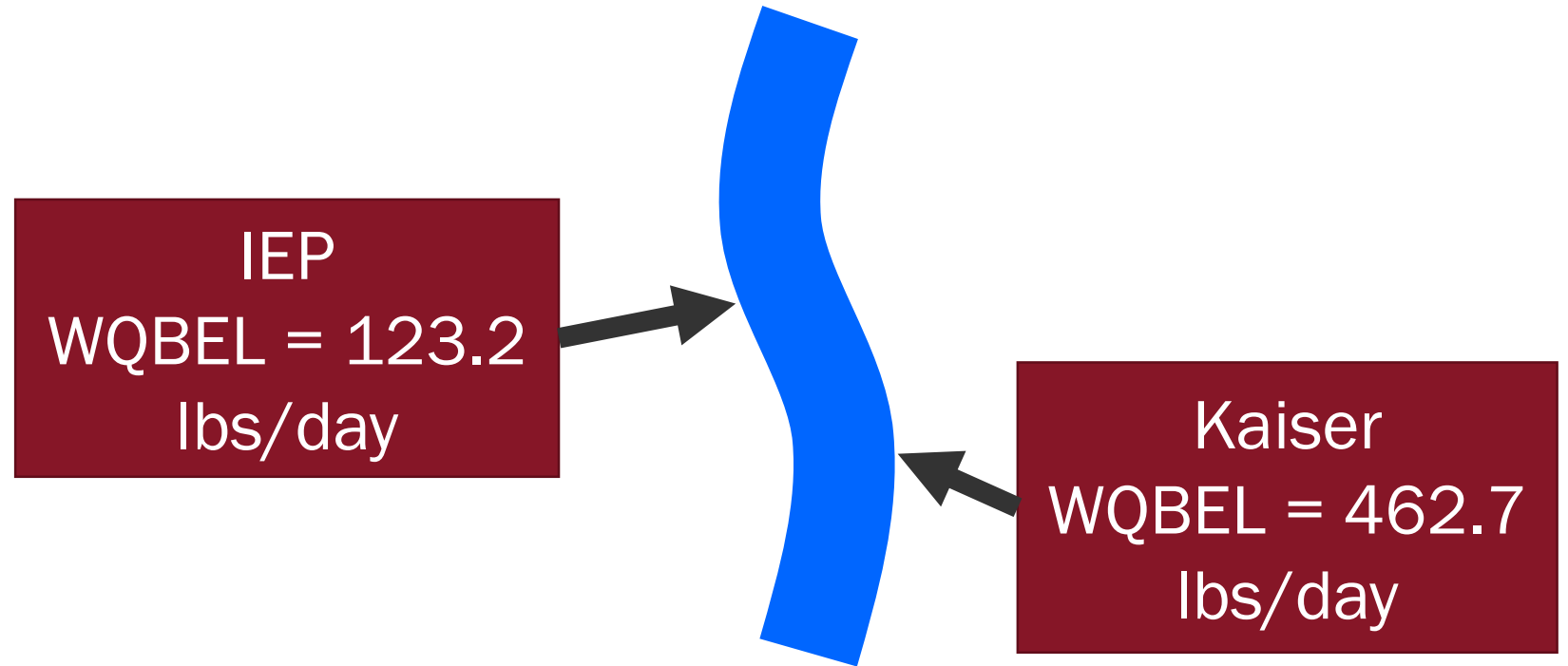


An individual discharger would not be considered in violation of their water quality based effluent limit (WQBEL), as long as the collective bubble limit is met during the same reporting period



What is a Bubble Limit?

CBOD₅ Seasonal Average



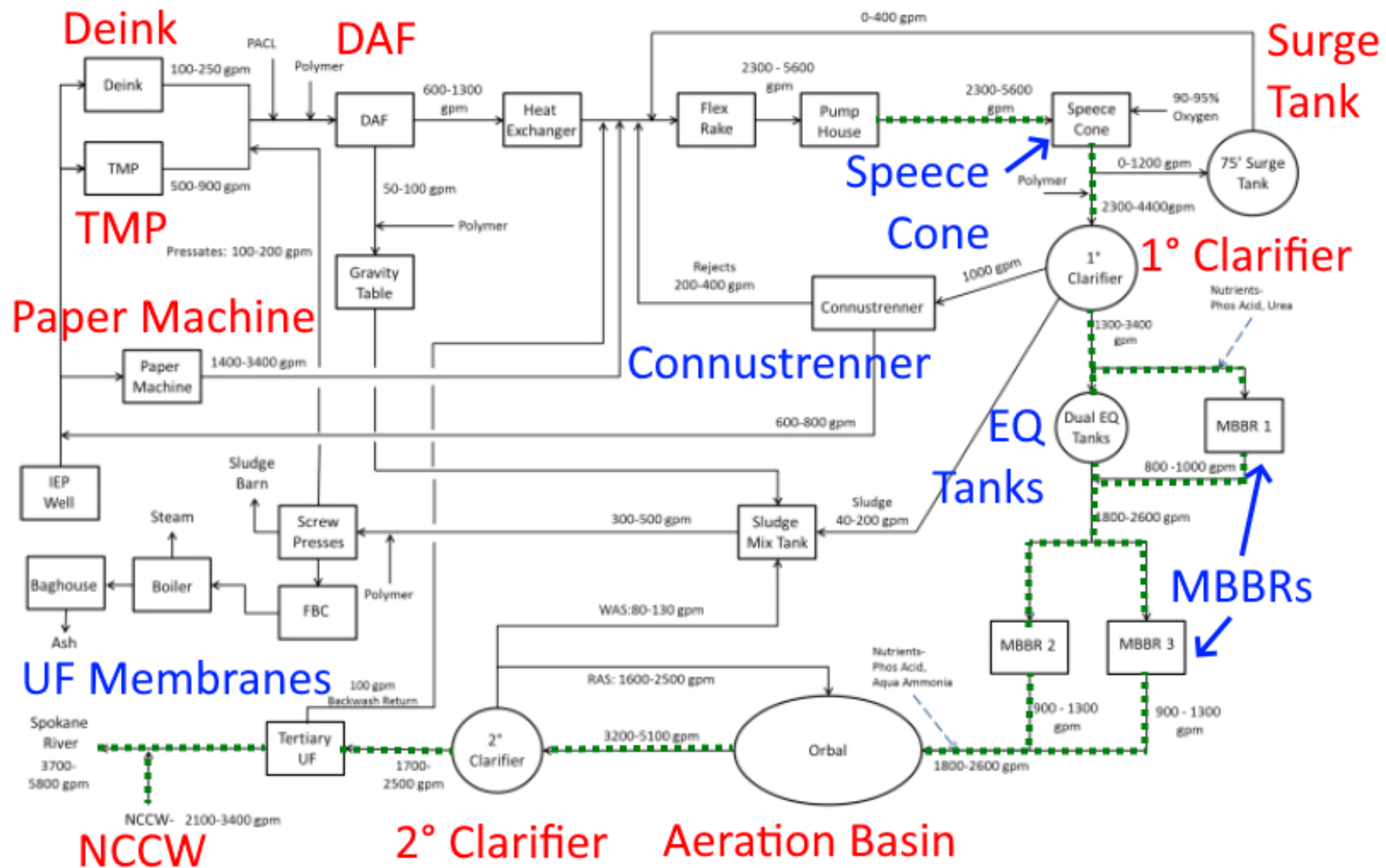
Kaiser < 462.7, then IEP limit =
 $123.2 + [(462.7 - \text{Kaiser load}) \div 4.247]$

Kaiser \geq 462.7, then
IEP limit = 123.2

Other Permit Conditions

- PCB pollutant minimization plan (PMP)
- Participation in the Spokane River Regional Toxics Task Force (as BMP condition in PMP)
- EPA Method 1668 Monitoring (monitoring incorporated into PMP)

Treatment Overview





Thank You!



Pat Hallinan

patrick.hallinan@ecy.wa.gov

Spokane River Watershed Webpage:

<https://ecology.wa.gov/Issues-and-local-projects/Environmental-projects/Improving-Spokane-Watershed>