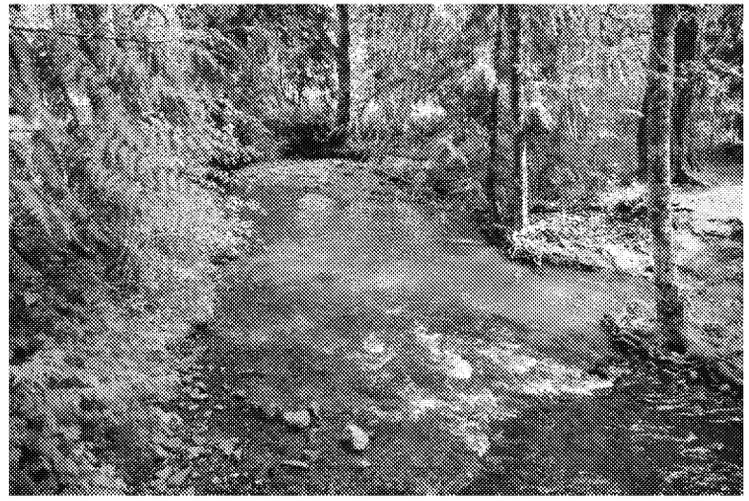


Willamette Basin Mercury Variance Rulemaking – Background

November 1, 2018
DEQ Headquarters

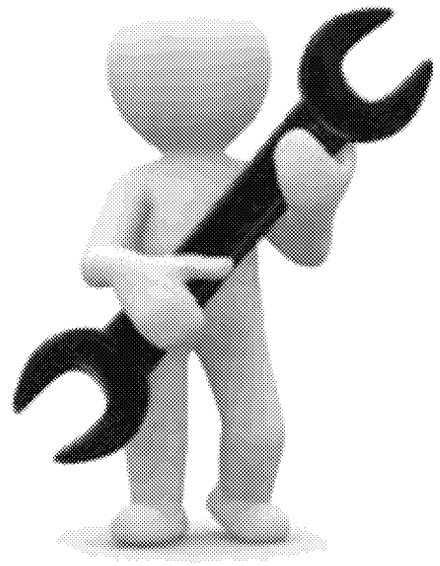
ED_004376_00118359-00001

What is a Variance?

- Tool allowed under Clean Water Act
- Time limited change to water quality standard
- Only applies to regulated discharges
- Does not change the underlying standard

When is a variance an appropriate tool?

- Designated use cannot be attained
- Dischargers cannot achieve effluent limits based on the criteria
- Progress toward the standard is feasible



Why develop a mercury MDV?

Mercury Listing (OHA advisory) (1998)

Human Health Criteria (2003/2011)

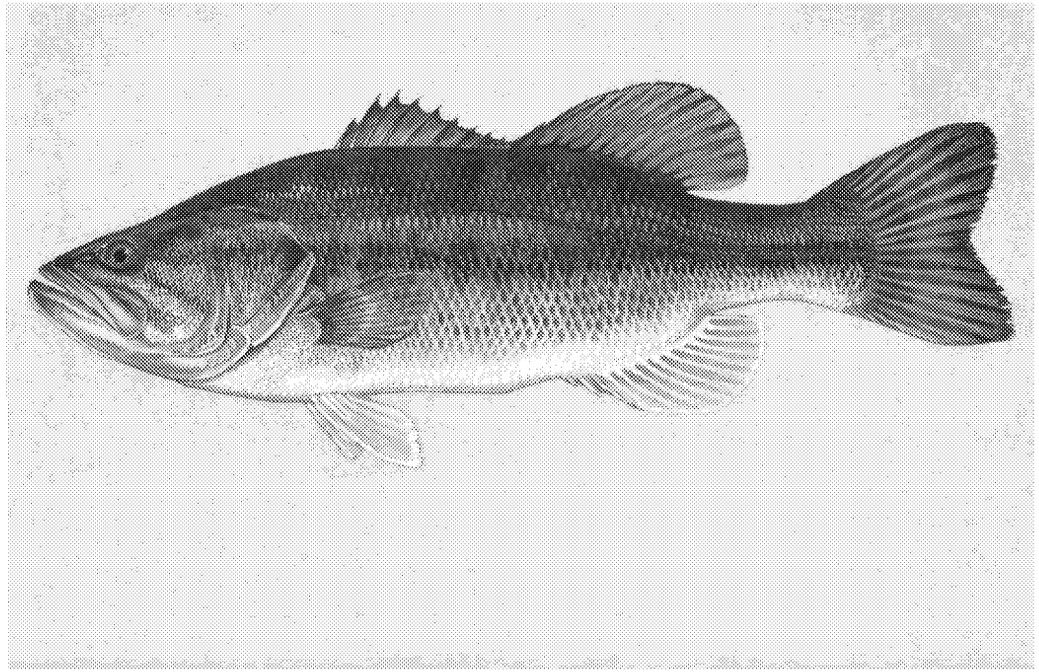
Willamette Basin Mercury TMDL (2006/2019)

Mercury in Willamette fish (2008-2010)

Permit Issuance Plan 2019

Human health criterion (2011)

- 175 g/day fish consumption
- Fish tissue criterion: 0.04 mg/kg methylmercury
- Implementation tools:
  - Variance rules and IMD
  - Other permit tools

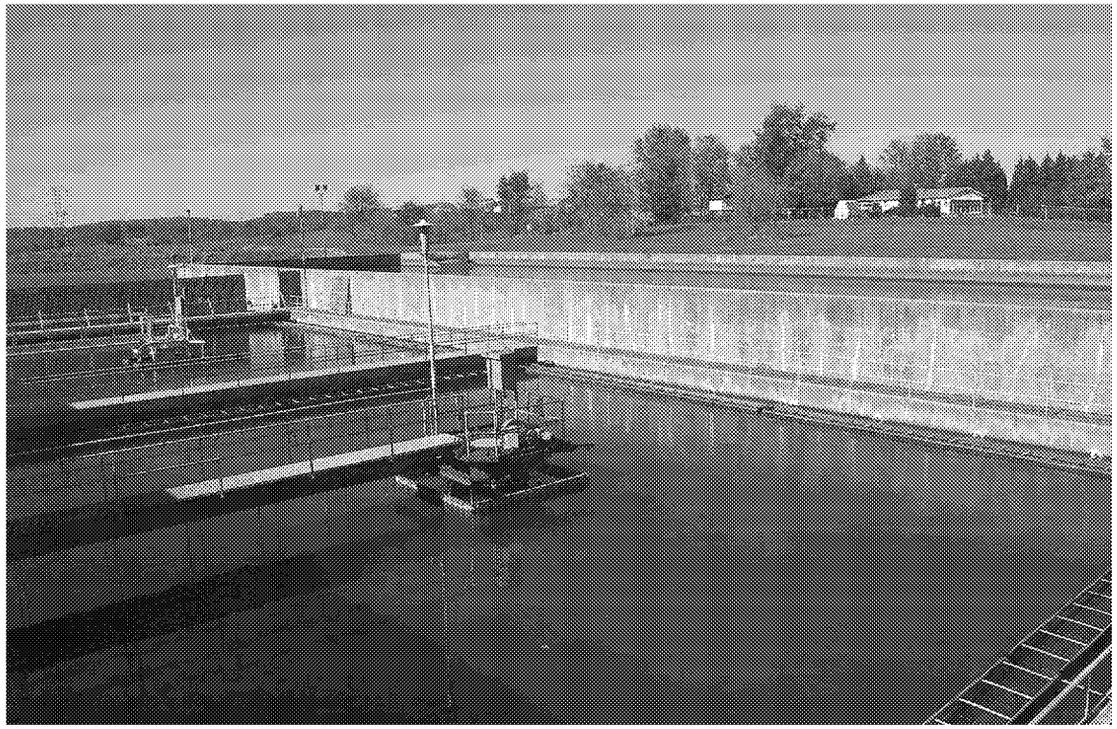


Willamette Basin TMDL (2006; 2019)

- Determine water concentration to meet fish tissue criterion
  - Bioaccumulation factor
  - Translator (dissolved methylmercury to total mercury)
- Wasteload allocations

Permitting Concerns

- Petition to reconsider CWS permit; include WQBEL for mercury
- 2020 Permit Issuance Plan: renew permits in Willamette Basin
- Unachievable mercury effluent limits

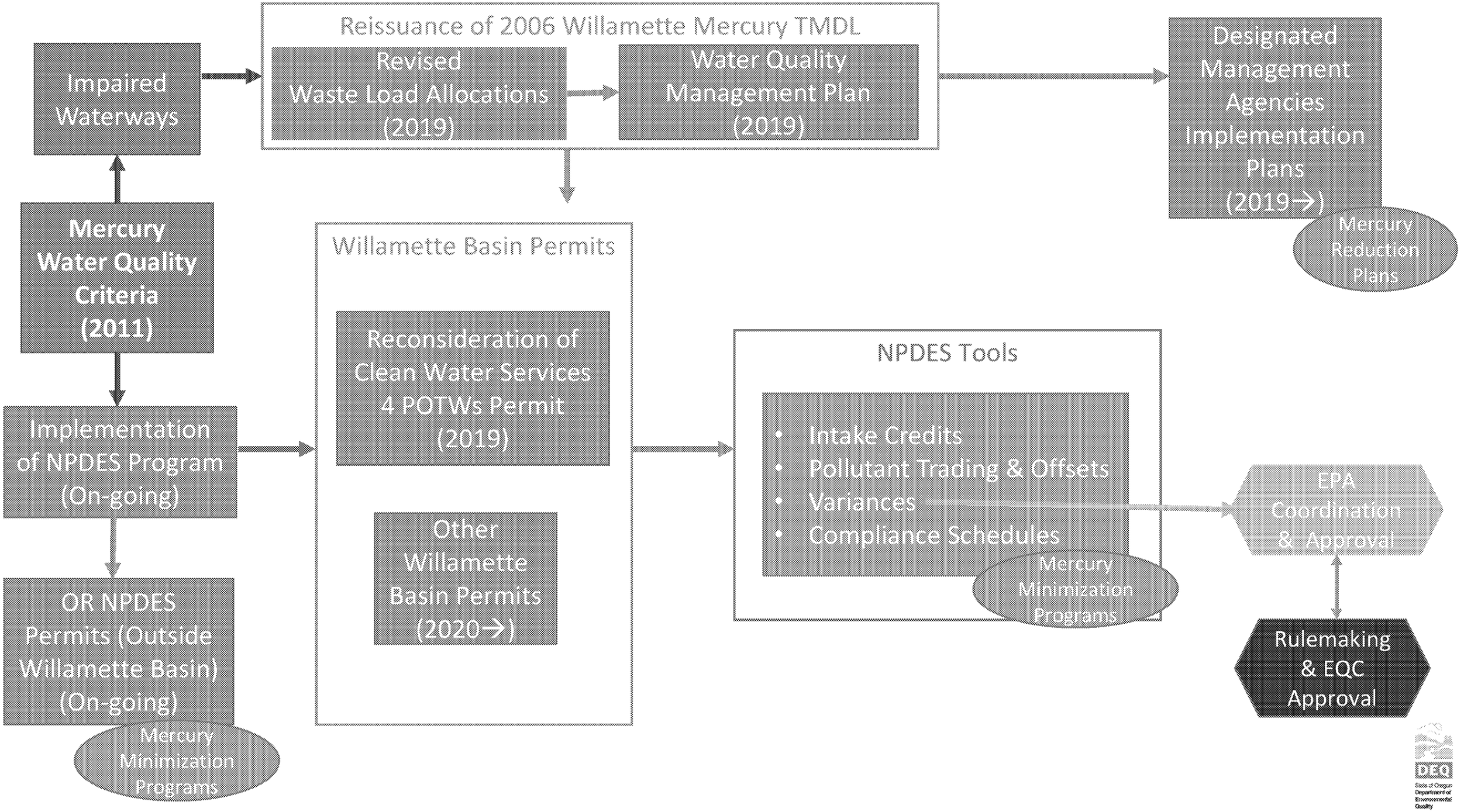


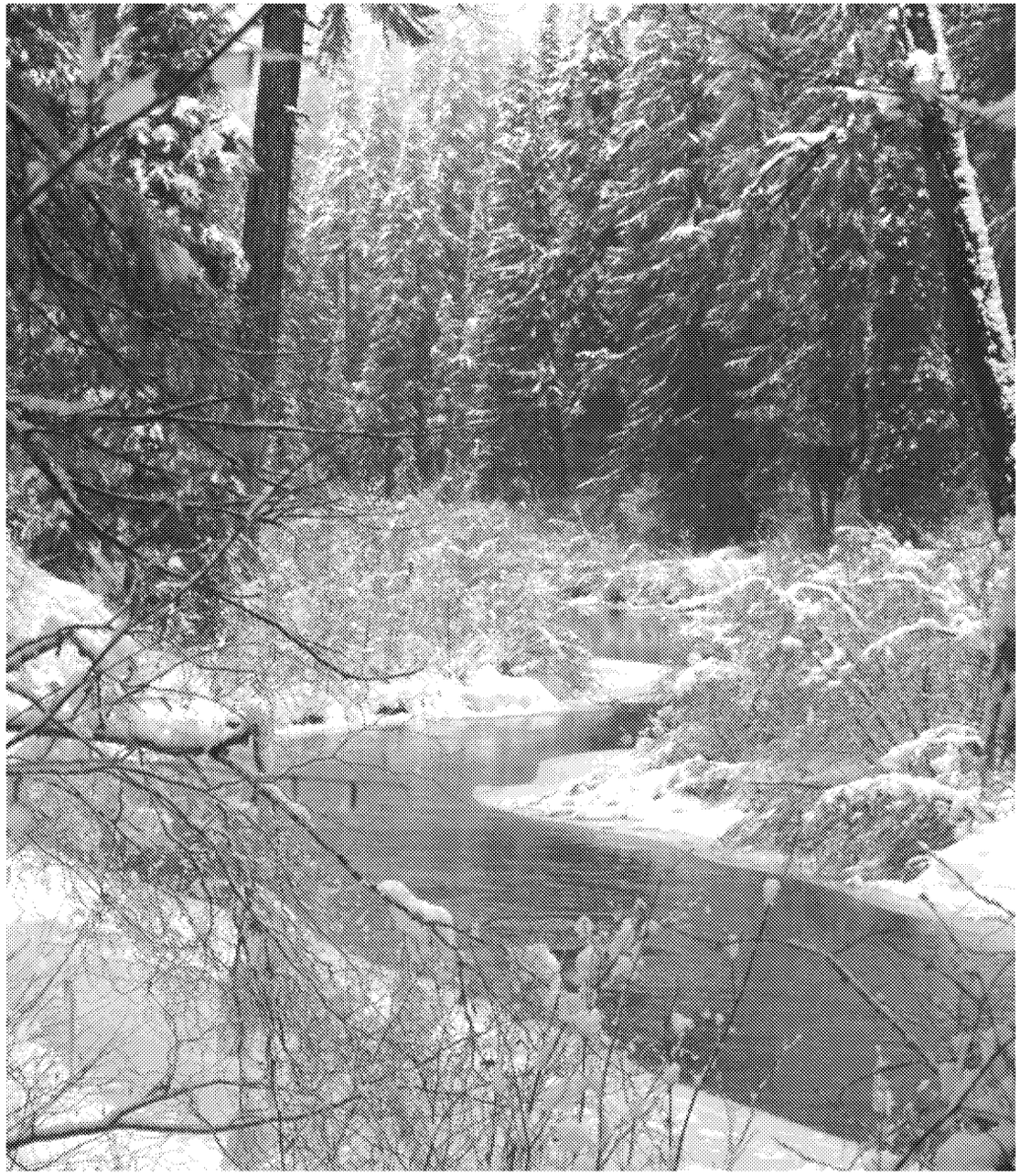
Mercury in Willamette Basin fish

- Fish tissue concentrations consistently above criterion
- Atmospheric deposition and natural sources
- Transport to waters through runoff, erosion and groundwater
- Point source contributions <5%

CWS Individual Variances

- Four WWTFs discharge to the Tualatin
- Criterion not attainable in the river
- Not feasible to achieve WQBELs
- Highest attainable condition for AWWTFs:
  - Optimize current treatment system
  - Mercury minimization program
- Monitor and report
- Re-evaluate in 5 years
- Working with EPA to ensure that analysis and documentation meet federal regs


Impaired Waterways
Reissuance of 2006 Willamette Mercury TMDL
Revised Waste Load Allocations (2019)
Water Quality Management Plan (2019)
Designated Management Agencies Implementation Plans (2019→)
Mercury Reduction Plans
Mercury Water Quality Criteria (2011)
Implementation of NPDES Program (On-going)
Willamette Basin Permits
Reconsideration of Clean Water Services 4 POTWs Permit (2019)
Other Willamette Basin Permits (2020→)
NPDES Tools
• Intake Credits
• Pollutant Trading & Offsets
• Variances
• Compliance Schedules
Mercury Minimization Programs
EPA Coordination & Approval
Rulemaking & EQC Approval
OR NPDES Permits (Outside Willamette Basin) (On-going)
Mercury Minimization Programs



Questions?

Thoughts?