

May 2010 Flood
Nashville, TN

Surprises and Responses

Scott Potter, PE
Director





Flood levels changed

- Previously protected properties are no longer flood-proof.



K.R. Harrington WTP plant flooded

- 2nd plant threatened and chemical supply road washed out.



Resources were stranded

- Assistant Director stranded in neighborhood.
- 160 MWS employees personally affected by flood damage (21%).
- MWS vehicles stuck in flood waters.



Relationships = Resources

- Across Departments



- Volunteer Agencies



- Outside the County



May

Water Quality Threatened

Turbidity

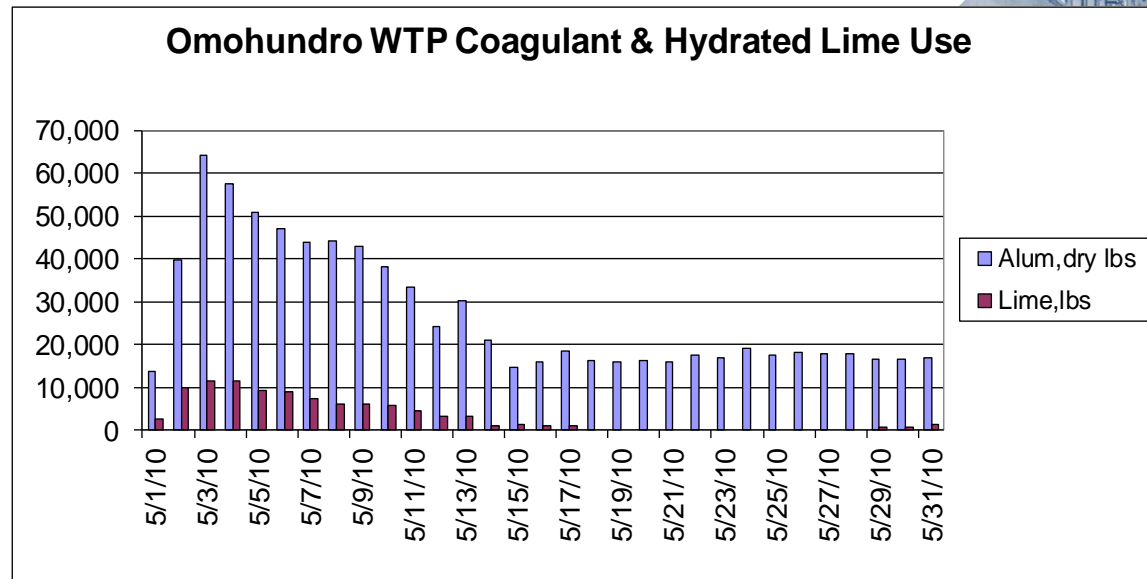
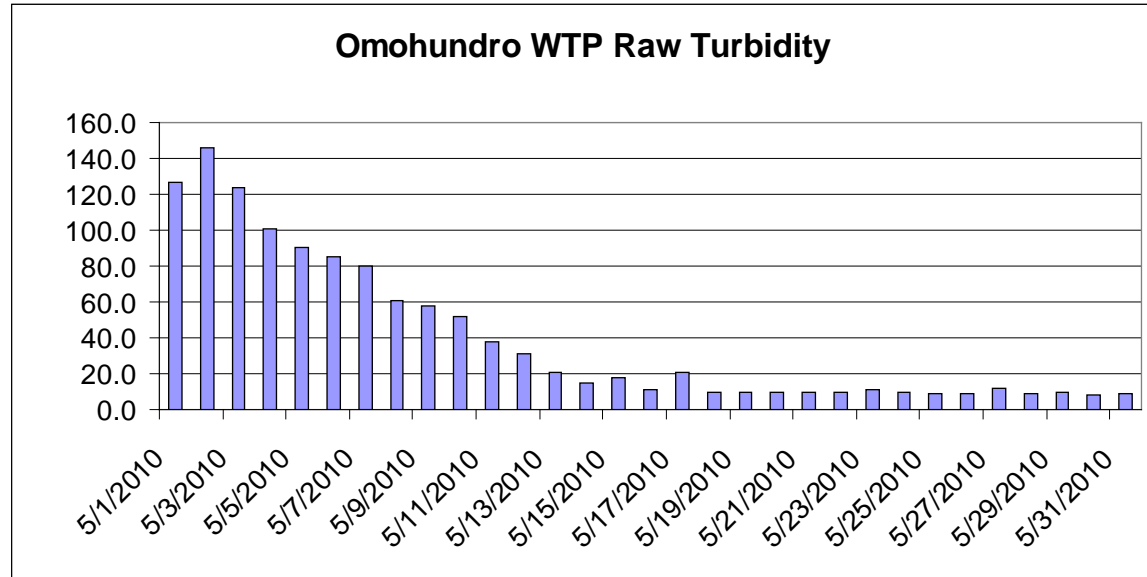
- May 3, 5am = 146 NTU
- Normal = 9 NTU or lower

May Chemical Costs

- \$212,473
- Normally \$50K - \$70K

May Electrical Costs

- \$304,000
- 2X normal monthly cost

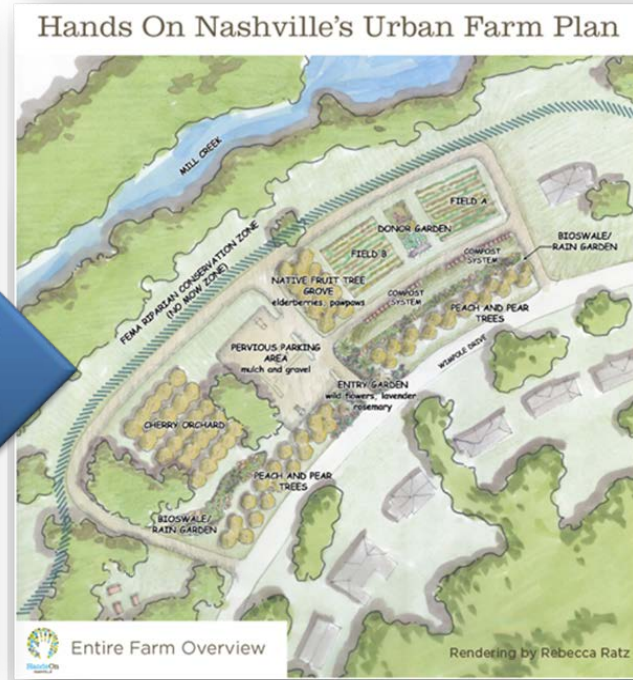


Mitigation: K.R. Harrington WTP

- Elevated hot house
- Relocate generators, switch gear
- Add 5th generator = increase capacity to 90mgd
- Seal wall penetrations
- Elevate chemical feed system
- Raise clear well vents



Mitigation = Fix building codes



*Don't do something now
that will have to be fixed 50 years later*



Community warning systems

Nashville SAFE: EOC

- Inundation mapping
- Timing charts
- Predictive action level maps

NERVE: Public/Media

- Real-time information
- Road closures
- Shelters
- School closings

