

ReduceFlooding.com

Best Management Practices for Sand Mines

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San Jacinto River



Source of sand for dozens
of mines

Source of water for
2 Million People

About ReduceFlooding.com

- Started after Hurricane Harvey to:
 - Explore causes of flooding
 - Lobby for mitigation
- Thousands of regular readers
- Focused on Lake Houston and upstream
- New stories every day
- Work with mainstream media
- Rent helicopters almost every month
- More than 17,500 photos since Harvey



Early on...

- Identified sand mining as large contributor to sedimentation
- USACE found San Jacinto River 90% blocked (left)
- Studied best practices
- Tried to engage TACA with no success

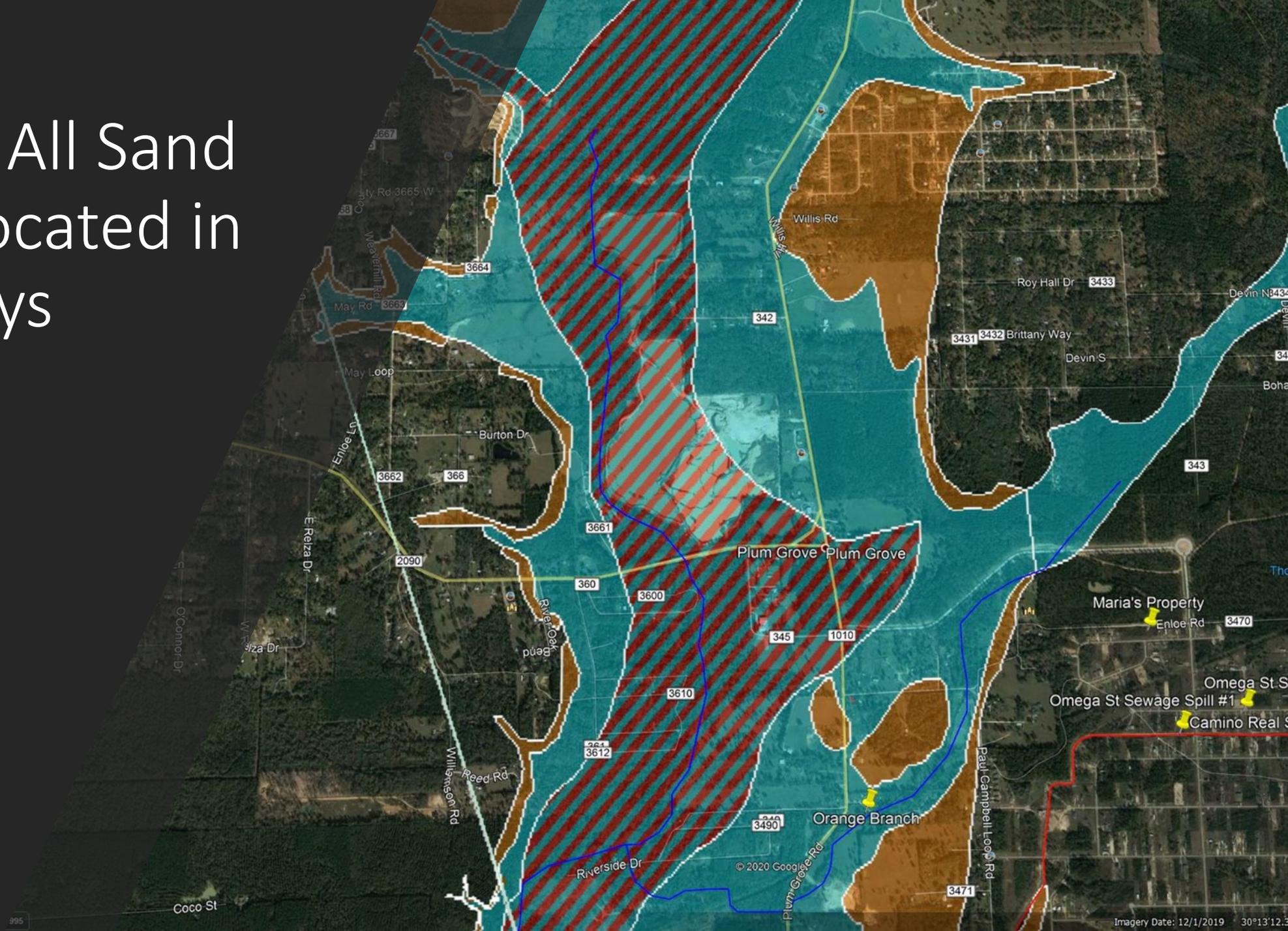
Three Critical Measures Remain Out of Reach

- Minimum setbacks from rivers
- Performance bonds for reclamation
- Mandatory compliance with best practices

Why Greater Setbacks

- Virtually all SJR mines located in floodways
- Mines regularly overrun by floodwaters
- Dikes break, release sediment-laden process water
- Dikes also obstruct floodways and increase:
 - Flooding
 - Erosion
- Taxpayers pay to remove sediment
- Water Quality

Virtually All Sand Mines Located in Floodways



Frequent Breaches



Constriction of Floodways

- Cut off floodway on one half of river
- Force water to other side
- Increases velocity, sheer factor
- Accelerates erosion





Sediment Dams Contribute to Flooding,
Cost Hundreds of Millions to Remove



Water Quality



Why Performance Bonds for Reclamation

- Walking away from obligations is cheaper than compliance
- Some will always try to pass cleanup costs on to public
- Waterways and cities littered with mining refuse, safety issues

Revegetation Costs More than Abandonment





Industrial Litter

Why Mandatory Best Practices

- Why obey regs when it's more profitable not to?
- Even with regs many still try to cheat
- Don't put those who comply at a competitive disadvantage
- Safety

More Profitable Not to Comply

Abandoned mine in Humble,
TX with steep sides, no berms,
or fencing endangers
neighboring properties and
roads

Hazard to children



Even With
Regs, Many
Cheat



Competitive Disadvantage for Compliance



Safety

NG and HVL pipelines
exposed by headward erosion
due to mining too closely



Conclusion

Month after month, muck comes from sand mines. We must stop pollution, flooding, waste of tax dollars.

