

The Anatomy of a Local Crude Oil Spill

10+ Years of Clean Up and Restoration

What Really Happens?

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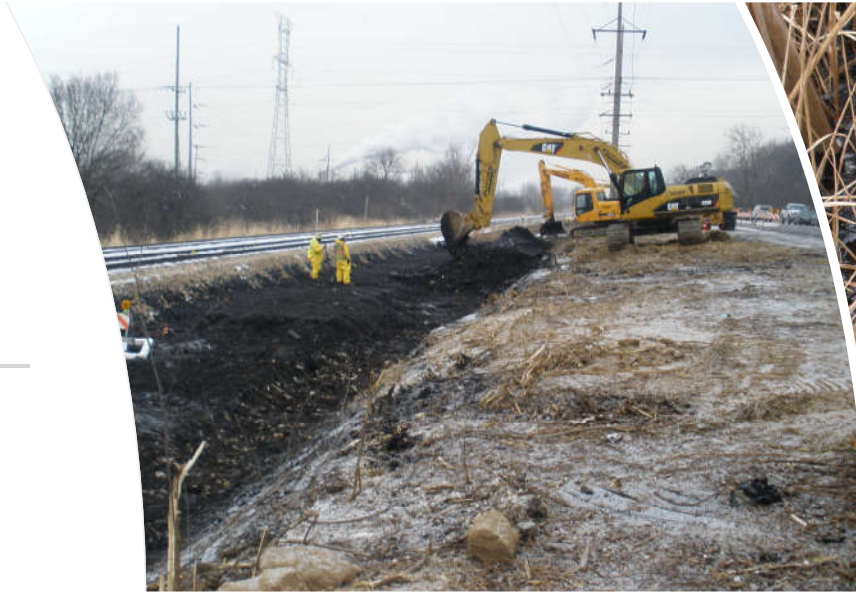


A Few Basic Facts

- The Crude Oil Release Occurred on December 10, 2010
- It was an accidental release from a pipeline carrying crude oil to a refinery
- I was retained starting on the day after it was discovered, and am the only consultant/contractor still working on the site
- 77,000 gallons of crude oil – estimated
- USEPA is onsite incident commander during an oil spill
- Site was designated Critical Habitat for federally endangered dragonfly species
- Site was mostly federally jurisdictional wetlands
- USEPA issued clean up order – USACE issued cease and desist order
- Ultimately resolved by US Department of Justice

The Beginning

- Where all did the oil go?
- 77,000 Gallons (estimated)
- How did it happen (show on next slides)





Google Earth



Google Earth

400 ft

N

Early Clean-Up Methods

- Finding the oil under the snow/ice
- Sorbent boom
- Floating boom
- Wheel skimmer
- Excavation

2010 12-17 and 12-19

















Google Earth

400 ft

N

12/21/2010



12/23/2010



1/6/2011



2/16/2011



3/8/2011



4/7/2011



5/11/2011



















10.18.2012



4/18/2013



5/13/2013



9/11/2013



12/6/2013



2/7/2014



4/8/2014



10/22/2014













12/20/2016











08/03/2018

9/5/2018



11/20/2018



12/13/2018



12/19/2018



3/18/2019



7/29/2019



8/29/2019



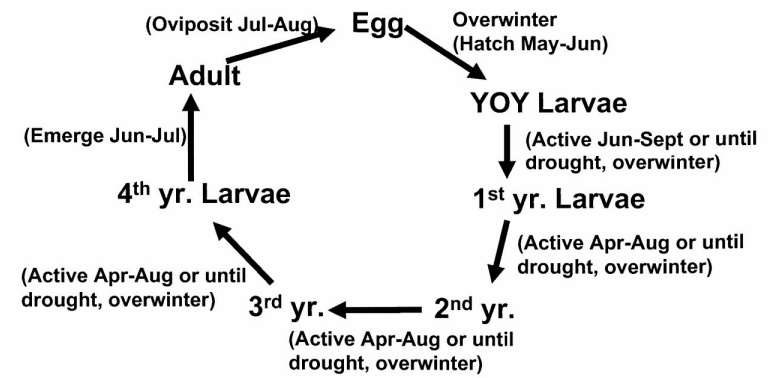
10/8/2019







Hines emerald dragonfly life cycle





03.30.2012



