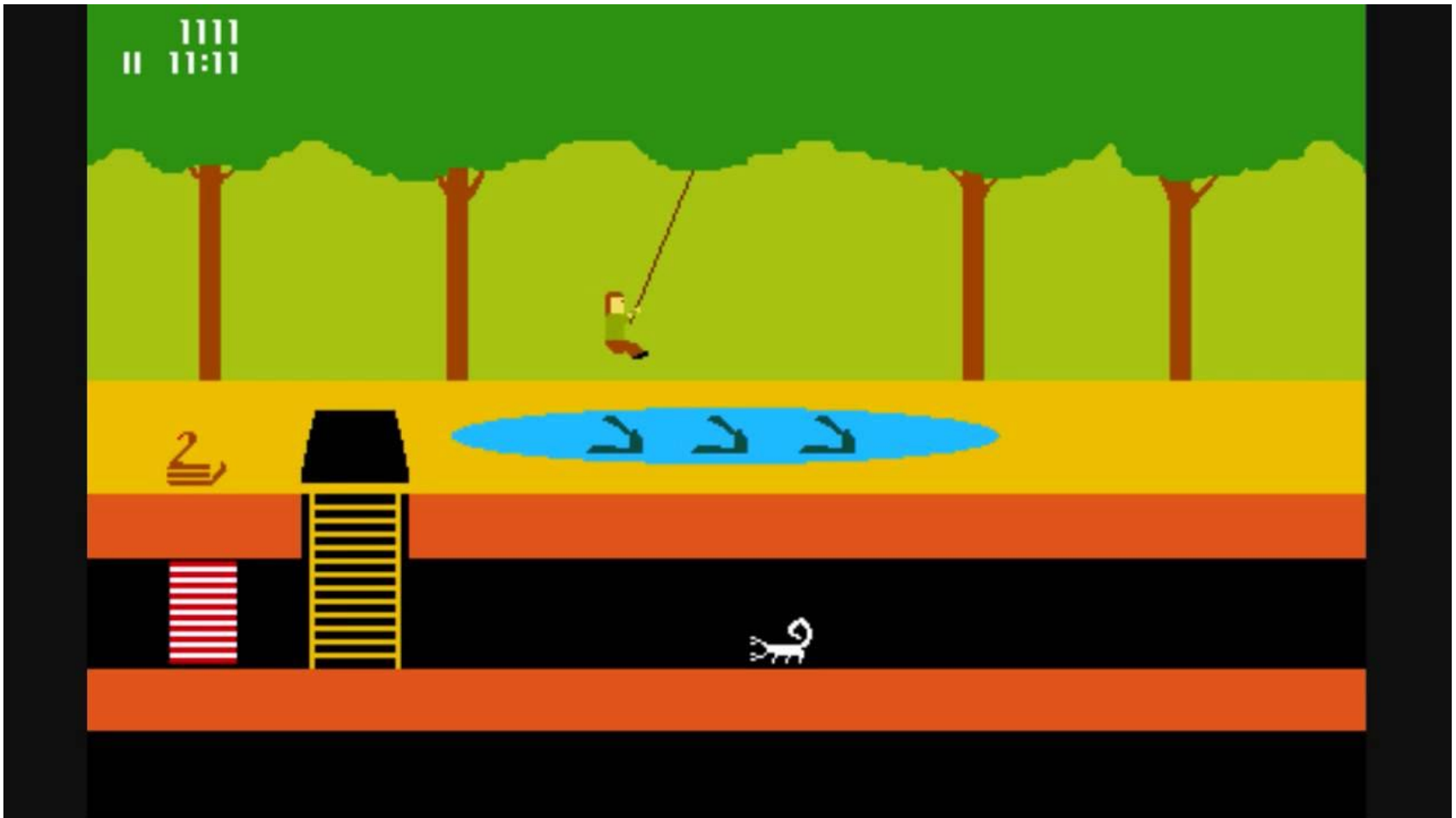




IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

Pitfalls in Permitting





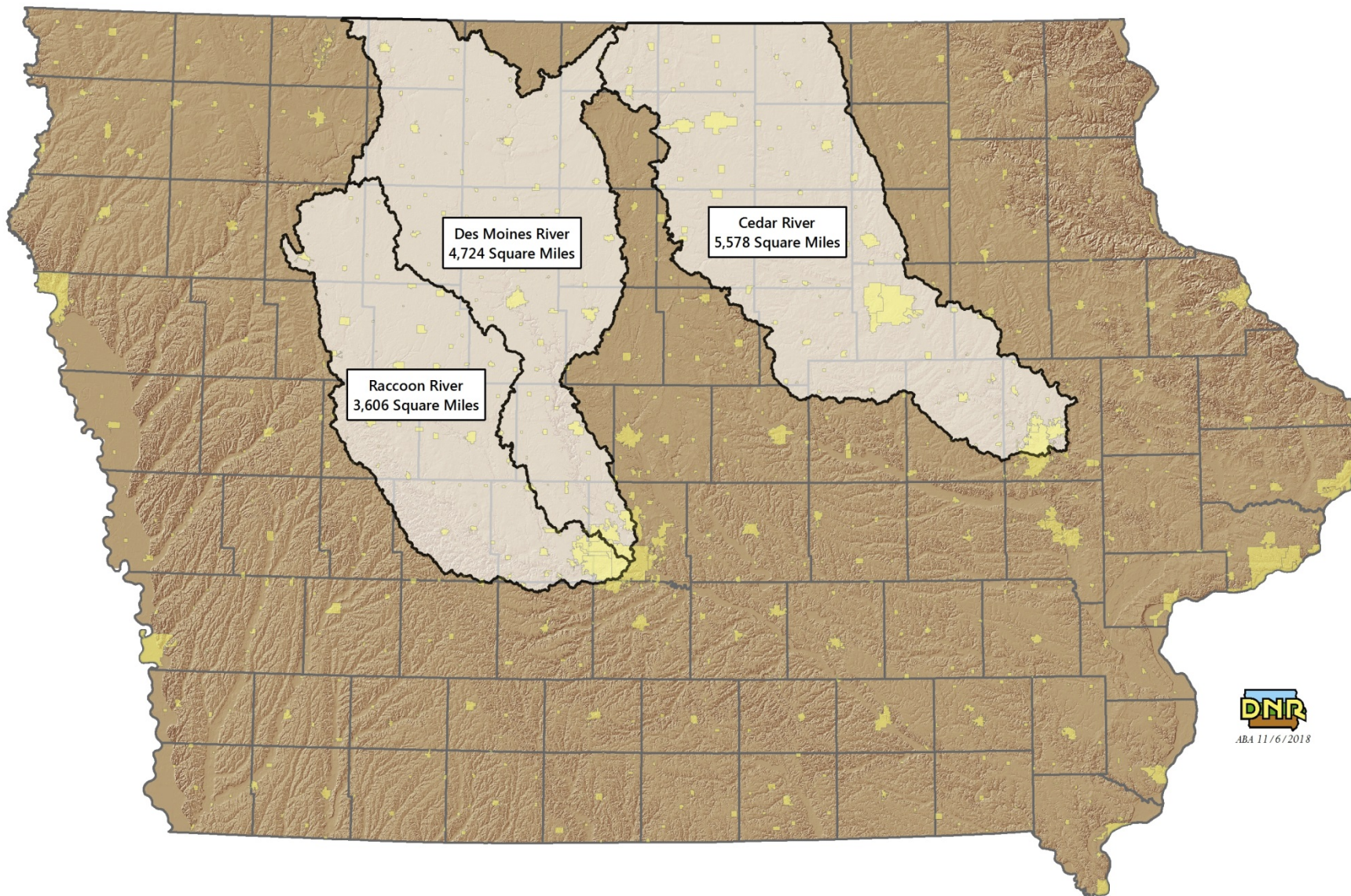


Here we go yo! So what's the scenario?!?

- Nitrate-N MCL of 10 mg/l
- 3 TMDLs

	Cedar River	Des Moines River	Raccoon River
Species	Total Nitrogen	Nitrate	TKN
NPS Load	91%	>90%	90%
Facility Count	95	74	61
Year Complete	2007	2009	2008

- Point source intended to be capped







Pitfall #1 – Intent vs Reality

- The Cedar River TMDL used 4 methods (Type 1-4) to calculate the total nitrogen effluent from an existing NPDES permitted facility.
 - Type 1 – 0.027 lbs/day TKN x 2000 census population
 - Type 2 – Per Capita TKN + 30d average industrial ammonia mass
 - Type 3 – CDLs used Per Capita TKN and days of discharge
 - Type 4 – Effluent monitoring
- The Des Moines River and Raccoon River TMDLs used 3 methods
 - Type 1 – Design influent TKN from construction permit
 - Type 2 – 0.027 lbs/day TKN x 2000 census population
 - Type 3 – Per Capita TKN + 30d average industrial ammonia mass

Pitfall #1 – Intent vs Reality Cont.

- Several facilities underestimated now require upgrades
- Flipside: Some can expand 3 fold
- What to do?
 - Implement based on intent or as exactly worded?
 - Reopen TMDL to correct?
 - Allow facility to recalculate PS WLA using actual data?
 - Find wiggle room in conversion of TMDL WLA to permit limits (e.g. daily load conversion to AML and MDLs)?



Pitfall #2 & #3– New & Missed Facilities or Outfalls

- No reserve
- Missed cities, water treatment plants, ethanol plants, quarries, etc
- Can't cause or contribute to the impairment
- What to do?
 - Reopen TMDL?
 - Shut them down?
 - Allow facility to calculate a PS WLA using actual data?
 - Calculate how much wiggle is left in overall PS load cap?
 - Implement on concentration basis (e.g., 9.5 mg/l)?



Pitfalls of the Pitfalls

- Time lost
- Legal uncertainty for point sources
- Frustration for everybody involved
- Lasting effects
- No really good solutions to fix old issues



What questions do you have?

