EPPLLEY AIRFIELD
2011 FLOOD
SAME OMAHA POST INDUSTRY DAY
Objective

- Protect Airport Assets
- Maintain Normal, Uninterrupted Air Operations
Threats

- Flood Water on Levee
- Rising Ground Water
SURROUNDED BY WATER
Lake Eppley ?
Design Phase

- East Storm Water Pump Station
  - Redesign due to High River Levels
- Protection of Assets
  - Prioritized Structures for Sandbags
- Assessments & Flood-Fighting Initiatives
  - Weighted Filters
  - Seepage Berms
  - Dewatering System
East Storm Water Pump Station
EAST STORM WATER PUMP STATION
New Discharge Pipes
Protection of Assets
Protection of Assets
Hawkins: All Hands Effort
Levee Assessments: FTP & GIS

GIS

- Airfield
- Safety Areas
- Utilities
- River Levels
- Levee System
- Flood Fighting
- Event Mapping
- Data Sharing
Event Assessment & Prioritization
Flood-Fighting Initiatives
Flood-Fighting Initiatives
Dewatering System
Problems Encountered

- Sand Boils
- Sink Holes
Failure Mode – Underseepage/Piping

Water Flow

Pipe Development (Movement of Material)

Sand Boils with movement of material
Major Construction Initiatives

- Seepage Berms and Weighted Filters
- 70 Dewatering Wells
- Sink Hole Repairs
- Inspection of Storm Water Pipes with TV Cameras
Weighted Filters & Seepage Blankets
Protection of Navigation Aids
South Seepage Blanket
Ground Water Pumping
70 Dewatering Wells
East Side Dewatering Wells
Dewatering Discharge
Levee Erosion Control @ Discharge
SINK HOLES
18 Major Sink Holes Repaired
Runway Sink Hole
Inspection of Storm Water Pipes Robotic Cameras
Monitoring
Success: No Interruption of Air Operations
Questions