LOCATIONS AND RESOLUTIONS OF REPORTED GROUND WATER CONFLICTS: 1986 – 2006

Prepared for submission to the Water Shortage Task Force by the Indiana Department of Natural Resources, Division of Water

ALLEN COUNTY

Significant Water Withdrawal Facility: limestone quarries, golf course irrigation

Location: Lower Huntington Road (Southwest of Fort Wayne)

Conflict Date(s): 1991-present

Status: active

Summary: 112 investigations have been conducted and 53 domestic wells have been replaced or upgraded due to ground-water level impacts. Water levels have been lowered at least 40 feet in the area, and appear to be declining at a rate of 1 foot per year. The two limestone quarries (currently under one ownership) and golf course voluntarily reimburse homeowners for expenses associated with water supply restoration.

Significant Water Withdrawal Facility: public water supply

Location: Aboite Township; (West of Fort Wayne)

Conflict Date(s): 1988-present

Status: active

Summary: 41 investigations have been conducted and approximately 14 wells have been replaced or upgraded due to ground-water level impacts. The water supply utility continues to install new production wells and increase withdrawal amounts. Water level declines of 20 to 30 feet occur in the area. The utility voluntarily reimburses homeowners for expenses associated with water supply restoration.

Significant Water Withdrawal Facility: limestone quarry

Location: Woodburn

Conflict Dates: 1998-present

Status: active

Summary: 40 investigations have been conducted and 2 wells have been replaced or upgraded due to ground-water level impacts. A stone quarry was reactivated in 1998 and has lowered water levels approximately 25 feet in the area. The quarry voluntarily reimburses homeowners for expenses associated with water supply restoration.

BOONE COUNTY

Significant Water Withdrawal Facility: public water supply

Location: 5 miles northwest of Lebanon

Conflict Dates: 1996-present

Status: active

Summary: 21 investigations have been conducted and 4 wells have been replaced or upgraded due to ground-water level impacts. The water supply utility is evaluating additional well sites in the area due to water supply needs. The utility voluntarily reimburses homeowners for expenses associated with water supply restoration.

CARROLL COUNTY

Significant Water Withdrawal Facility: public water supply and limestone quarry

Location: Delphi

Conflict Date(s): 1994-present

Status: active

Summary: 86 investigations have been conducted and 39 wells have been replaced or upgraded, or city water has been provided, due to ground-water level impacts. The limestone quarry has been expanding and the water supply need of the public utility has increased. Water level declines of nearly 80 feet have occurred in the area. The quarry and utility voluntarily reimburse homeowners for expenses associated with water supply restoration.

GRANT COUNTY

Significant Water Withdrawal Facility: public water supply

Location: north side of Marion **Conflict Dates:** 1986-present

Status: active

Summary: 33 investigations have been conducted and 11 wells have been replaced or upgraded due to ground-water level impacts. The water supply utility activated a new well field in 1988 due to increased demand. Water levels have been lowered approximately 15 feet in the vicinity of the well field. The utility voluntarily reimburses homeowners for expenses associated with water supply restoration.

HAMILTON COUNTY

Significant water Withdrawal Facility: public water supplies, limestone quarry, golf

course irrigation, construction dewatering, agricultural irrigation

Location: Hamilton County **Conflict Dates:** 1988-present

Status: active

Summary: 202 investigations have been conducted and 50 domestic wells have been upgraded or replaced, or city water provided, due to ground-water level impacts. Water level lowering is primarily seasonal, and appears to be exacerbated by continued domestic development. Declines of 30 to 40 feet have been documented at various locations within the county. Homeowners are voluntarily reimbursed for expenses associated with water supply restoration when liability is determined by DNR staff.

HENDRICKS COUNTY

Significant Water Withdrawal Facility: Public water supply, industrial, golf course

irrigation, construction dewatering **Location:** Hendricks County **Conflict Dates:** 1988-current

Status: active

Summary: 226 investigations have been conducted and 49 domestic wells have been upgraded or replaced, or city water provided, due to ground-water level impacts. Water level declines of at least 50 feet have been documented west of Brownsburg due to public water supply withdrawals and golf course irrigation. Lowering of water levels occurs in the City of Danville due to public water supply pumping, and at other locations in the county due to industrial withdrawals and construction dewatering. Homeowners are voluntarily reimbursed for expenses associated with water supply restoration when liability is determined by DNR staff.

HOWARD COUNTY

Significant Water Withdrawal Facility: Limestone quarry, golf course irrigation

Location: Kokomo area **Conflict Dates:** 1986-present

Status: active

Summary: 94 investigations have been conducted and 40 domestic wells have been upgraded or replaced, or city water provided, due to ground-water level impacts. Water level declines of 40 to 50 feet have occurred west of Kokomo due to quarry dewatering, and seasonal declines of 10 to 20 feet south of Kokomo caused by golf course irrigation. Homeowners are voluntarily reimbursed for expenses associated with water supply restoration when liability is determined by DNR staff.

JASPER COUNTY

Significant Water Withdrawal Facility: Limestone quarry, public water supply,

confined dairy operation, agricultural irrigation.

Location: Rensselaer area **Conflict Dates:** 1986-present

Status: active

Summary: 75 investigations have been conducted and 20 domestic wells have been upgraded or replaced due to ground-water level impacts. Limestone quarry dewatering and public water supply withdrawals have lowered water levels approximately 80 feet within the city of Rensselaer. Agricultural irrigation and water withdrawals for confined dairy operations exist in the west-central portion of the county, and seasonally lower water levels up to 50 feet in the bedrock aquifer. Homeowners are voluntarily reimbursed for expenses associated with water supply restoration.

MARION COUNTY

Significant Water Withdrawal Facility: Public water supply, industrial, golf course

irrigation, construction dewatering

Location: Indianapolis

Conflict Dates: 1987-present

Status: active

Summary: 122 investigations have been conducted and 24 domestic wells have been upgraded or replaced, or city water provided, due to ground-water level impacts. Public water supply withdrawals occurring on the south side of Indianapolis have caused the failure of some shallow residential wells. Temporary construction dewatering, industrial pumpage and golf course irrigation occurring throughout the city has resulted in site-specific water resource issues. Homeowners are voluntarily reimbursed for expenses associated with water supply restoration.

NEWTON COUNTY

Significant Water Withdrawal Facility: Agricultural irrigation, confined dairy

operation

Location: Northern Newton County

Conflict Dates: 1986-present

Status: active

Summary: 35 investigations have been conducted and 15 domestic wells have been upgraded or replaced due to ground-water level impacts. Agricultural irrigation and withdrawals for confined dairy operations seasonally lower water levels up to 50 feet in the bedrock aquifer. Homeowners are voluntarily reimbursed for expenses associated with water supply restoration.

PUTNAM COUNTY

Significant Water Withdrawal Facility: Agricultural irrigation, industry

Location: Northeastern Putnam County

Conflict Dates: 1994-present

Status: active

Summary: 25 investigations have been conducted and 13 domestic wells have been upgraded or replaced due to ground-water level impacts. Agricultural irrigation seasonally lowers water levels up to 30 feet in the area. Homeowners are voluntarily reimbursed for expenses associated with water supply restoration. Industrial withdrawals appear to have a minimal impact on ground-water levels, but may reduce the flow of Raccoon Creek.

SAINT JOSEPH COUNTY

Significant Water Withdrawal Facility: Landfill construction, industry

Location: Southeastern St. Joseph County near Town of Wyatt

Conflict Dates: 2005-present

Status: active

Summary: 26 investigations have been conducted and 21 wells have been upgraded or replaced due to ground-water level impacts. Division of Water staff documented that dewatering operations conducted by the landfill lowered water levels in the area and contributed to the well failures. The landfill was assessed 60% liability by DOW, but agreed to voluntarily reimburse each homeowner for the entire cost of well installation/upgrade.

Stream Reaches identified as areas of conflict related to water withdrawal (DRAFT)

(based primarily on experiences in 1988)

- 1. **Kankakee River**: Power Plant, Irrigation (agriculture), and Instream Uses (Fish and Wildlife)
- 2. **St. Joseph River/Ft. Wayne**: Public Water Supply, Irrigation (agriculture), and Instream Uses (sensitive species)
- 3. **Wildcat Creek**: Public Water Supply, Irrigation (golf course) and Instream Uses (WWTP)
- 4. **Prairie Creek**: Irrigation (sod farm) and Instream Uses (Lebanon STP)
- 5. **Brush Creek** (Vernon Fork Muscatatuck): Public Water Supply and Irrigation (golf course)
- 6. **Marion County** (White River, Eagle Creek, and Fall Creek): Public Water Supply, Power Plant, Irrigation (golf course), and Instream Uses (WTF and Fish and Wildlife)
- 7. White River/Johnson County: Public Water Supply, Power Plant, Irrigation (golf course), and Instream Uses (WTF and Fish and Wildlife)
- 8. **Stucker Fork/Muscatatuck** (Hardy Lake): Public Water Supply and Industry (packing plant)
- 9. **Sugar Creek**: Public Water Supply, Power Plant, and Instream Uses (Crawfordsville WWTP) (Recreation- Canoeing)