

Issue Paper No. 1 – Background Information
Hardin County Water District No. 2
Regional Wastewater Facilities Plan

This issue paper presents some background information relevant to the Advisory Committee. The information presented in this issue paper will be discussed at Advisory Committee Meeting No. 1.

Facilities Planning

A Regional Wastewater Facilities Plan (RFP) is a comprehensive plan for the management of wastewater collection and treatment facilities. Planning is intended to define the most appropriate 'local' solution to providing wastewater service (collection and treatment) for a defined planning area over a defined period of time. Typically, the planning term is 20 years, however, other terms can be used. The goal of the plan is to ultimately protect our environment and human health by providing reliable wastewater collection and treatment for areas of greatest need. The RFP is ultimately reviewed and approved by the Kentucky Division of Water (KDOW). KDOW requires a checklist be submitted with the completed RFP. A copy of the most current checklist (dated 6/15/01) is attached for reference. The KDOW review and approval process takes from 3 to 12 months to complete. Review and approval considers environmental and state clearinghouse reviews in addition to a technical review.

A facilities plan is required by regulation (401 KAR 5:006, Section 2), at the request of KDOW (WWTP is over 90% of design capacity, or watershed initiative), or as part of an enforcement action (Agreed Order). 401 KAR 5:006, Section 2 requires a RFP or update to an RFP for any of the following reasons:

1. A new regional wastewater treatment plant is proposed,
2. The equivalent population served by an existing WWTP increases by 30% or more,
3. The average daily flow design capacity at an existing WWTP increases by over 30%.
4. A regional facility applies for a grant from USEPA or a loan from the State Revolving Fund (SRF) program,
5. A regional planning agency considers an RFP to be in their best interest, or
6. An existing RFP (formerly called '201 plan') has not been updated in the last 20 years.

A facilities plan includes the following components:

- Introduction
- Planning area
- Existing facilities (existing collection and treatment facilities, land use, available capacities)
- Project need (compliance concerns, legal actions, water quality concerns, adequate capacity, public health concerns)
- Population and flow projections
- Environmental setting (water quality, waste load allocation (future effluent limits), wetlands, 100 year flood plain, topography, geology, suitability of soils)
- Alternatives evaluation (no action, regionalization, multiple collection and treatment alternatives, economic and non-economic evaluations, select recommended plan)
- Implementability (legal authority, concurrence of all involved entities, anticipated user rates)
- Public participation (public hearing and public comments)



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RFPs must be prepared and stamped by a Professional Engineer.

Planning Areas

The planning area defines the area of study in the RFP. Planning area boundaries can follow legal boundaries, but are preferred to follow drainage boundaries, if possible. Planning areas should encompass populated areas, existing WWTP discharges, areas with failing septic tanks, areas with no treatment (straight pipes), proposed discharges (if new WWTP is proposed), known future developments, administrative boundaries, water supplies (wellhead/groundwater protection, lakes/reservoirs) to protect supply of drinking water. The RFP must contain one planning area map on an original USGS 7.5 minute topo map. Planning areas can provide protection against propagation of future package plants. KDOW would offer the planning entity the right of first refusal for serving any new discharge.

If existing planning area boundaries are modified, resolutions from those entities would be required.

The planning areas will be subdivided into time frames for service during the RFP preparation. The time frames typically used are 'current', '0-2 year', '3-10 year', and '11-20 year'. Any area included in the planning area, but not identified in any of the above categories, would not be considered for service within the 20-year life of the plan. When an area is shown for service in one of the above time frames, KDOW reasonably expects follow through, especially for the 0-2 year projects. KDOW understands that funding and other issues can delay the progression of planned work. A critical success factor to the completion of the RFP will be defining the areas to be served and the timeframes for service. The Advisory Committee (AC) will be integrally involved in assisting with these decisions.

Figure 1, showing the current planning area boundaries, is attached. The planning area boundary will be defined in AC Meeting No 2.

Existing Wastewater Treatment Plants (WWTPs) in Hardin County

From a search of EPA and KDOW records, a total of 4 municipal WWTPs and eleven private or 'package' WWTPs were identified. The following table lists the rated capacities and the reported utilization (average from April 2002 to March 2003). The location of each WWTP is shown on Figure 2. More information on the utilization and capacity of each municipal WWTP will be provided later in the study.

Issues To Be Resolved

Select planning period for RFP.

Define planning area in AC Meeting No 2.

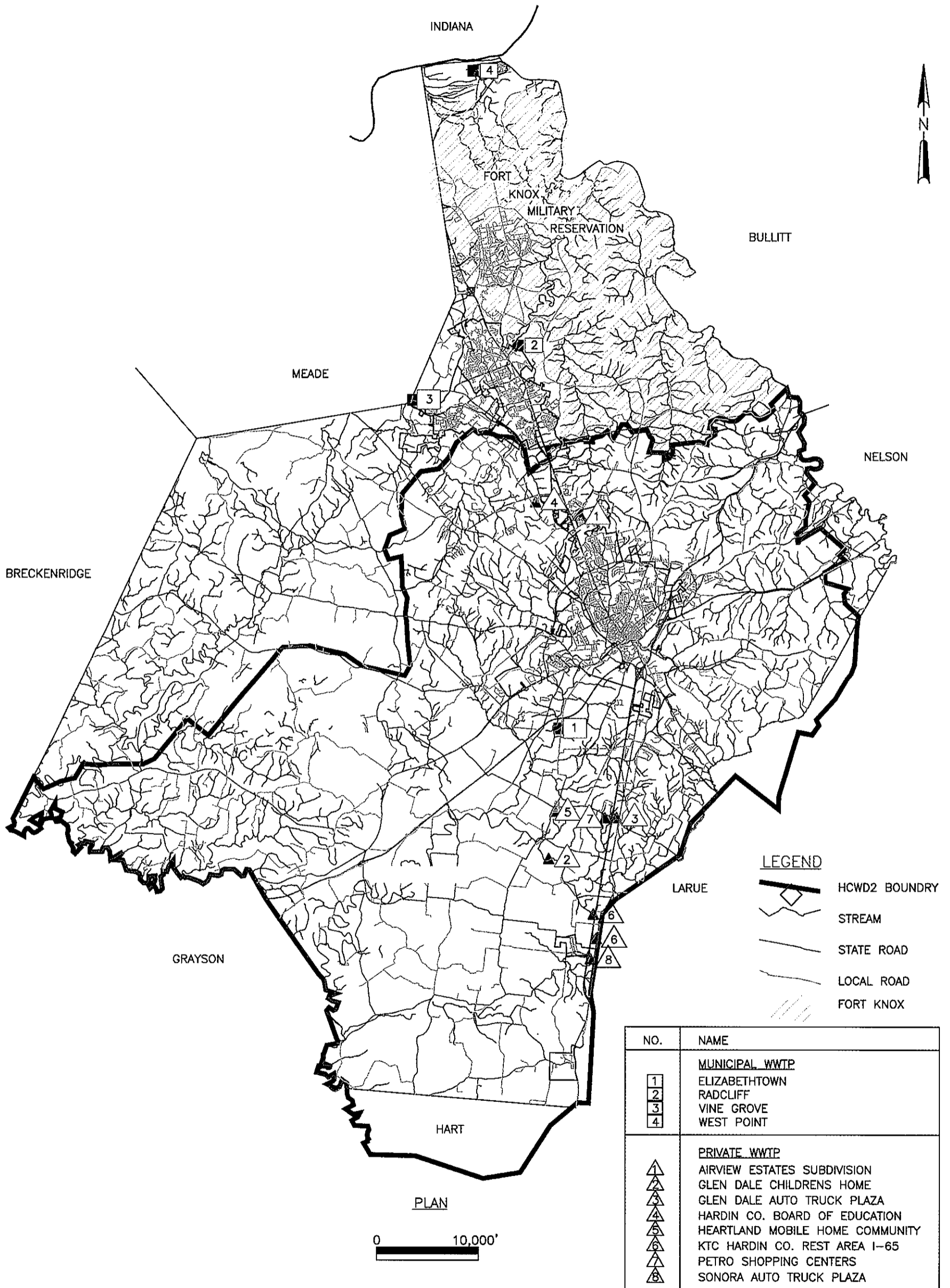
Define areas to be served and relative time frames in future AC meetings.



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WWTP Name	Type	Rated Capacity (mgd)	Average Flow (4/02 - 3/03) (mgd)	Percent of Capacity
Elizabethtown	Municipal	7.2	6.18	86
Radcliff	Municipal	4.0	2.34	59
Vine Grove	Municipal	0.714	0.30	41
West Point	Municipal	0.20	0.11	53
Airview Estates Subdivision	Private	0.055	0.032	58
Glendale Childrens Home	Private	0.022	0.010	45
Glendale Auto Truck Plaza	Private	0.015	0.006	40
Hardin County Board of Education Outfall 001	Private	0.012	0.005	25
Hardin County Board of Education Outfall 002	Private	0.012	0.004	33
Heartland Mobile Home Community	Private	0.007	0.004	57
KTC Hardin Co Rest Area I-65 Outfall 001	Private	0.02	0.009	45
KTC Hardin Co Rest Area I-65 Outfall 002	Private	0.02	0.01	50
Petro Shopping Centers	Private	0.06	0.036	60
Sonora Auto Truck Plaza Outfall 001	Private	Unknown	0.001	Unknown
Sonora Auto Truck Plaza Outfall 002	Private	Unknown	0.001	Unknown





NO.	NAME
1	MUNICIPAL WWTP ELIZABETHTOWN
2	RADCLIFF
3	VINE GROVE
4	WEST POINT
△	PRIVATE WWTP AIRVIEW ESTATES SUBDIVISION
△	GLEN DALE CHILDRENS HOME
△	GLEN DALE AUTO TRUCK PLAZA
△	HARDIN CO. BOARD OF EDUCATION
△	HEARTLAND MOBILE HOME COMMUNITY
△	KTC HARDIN CO. REST AREA I-65
△	PETRO SHOPPING CENTERS
△	SONORA AUTO TRUCK PLAZA

SHEET 2 00-G-01 JOB NO. 5-980.001	HARDIN COUNTY WWTP'S HARDIN COUNTY WATER DISTRICT NO. 2 REGIONAL WASTEWATER FACILITIES PLAN HARDIN COUNTY, KENTUCKY	DATE: 01/15/05	NO.	REVISIONS	DATE:
		DES BY: MK CHK BY: MAS			
		RECORD DRAWING			
		BY: DATE: CONTRACTOR:			

