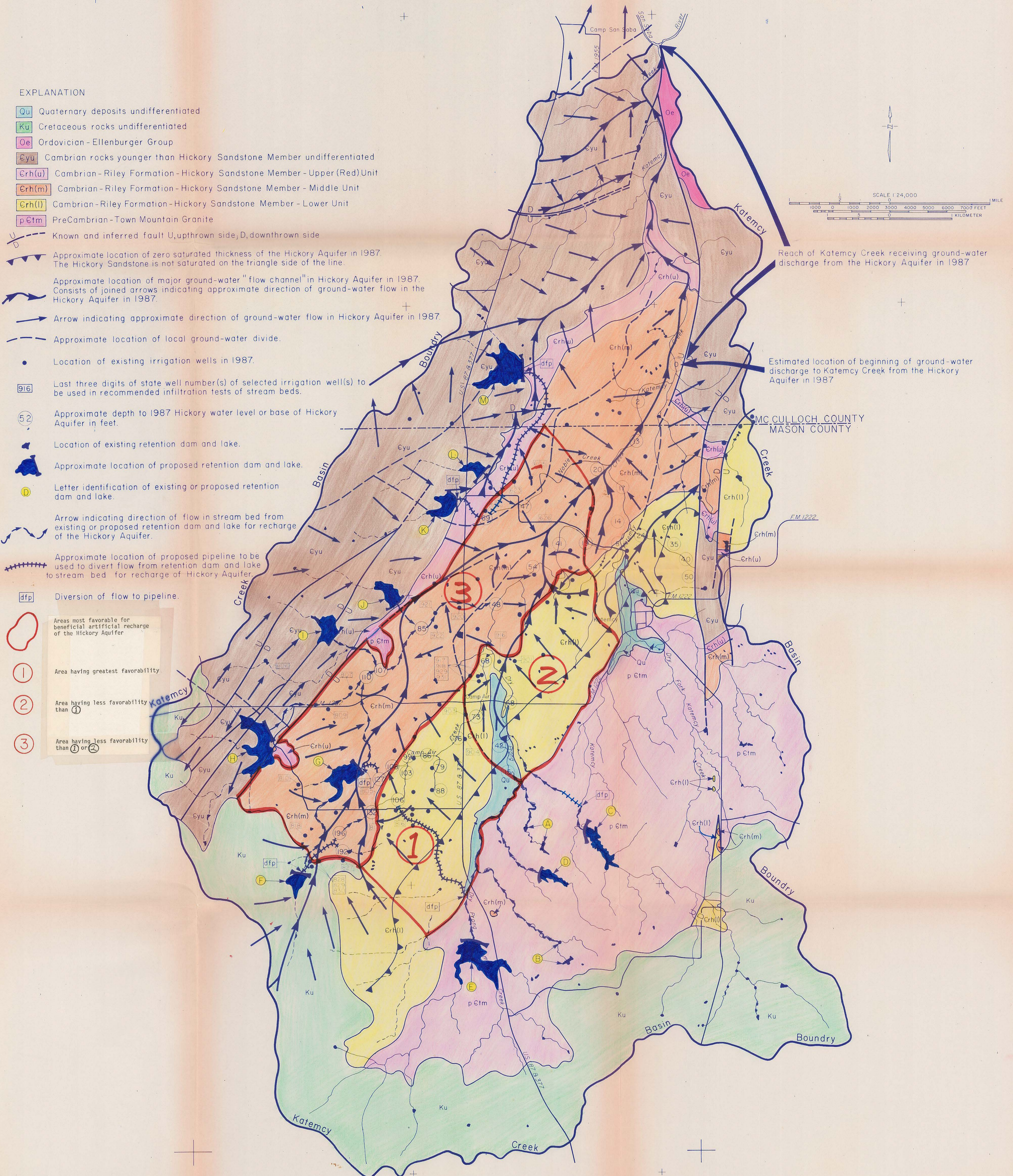


FIGURE 13

Areas Most Favorable and Proposed Alternative Sources of Water for Beneficial Artificial Recharge of the Hickory Aquifer in the Katemcy Creek Basin, McCulloch and Mason Counties, Texas.



EXPLANATION

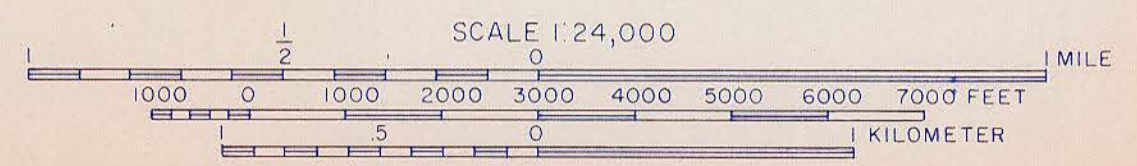
- Qu Quaternary deposits undifferentiated
- Ku Cretaceous rocks undifferentiated
- Oe Ordovician - Ellenburger Group
- Eyu Cambrian rocks younger than Hickory Sandstone Member undifferentiated
- Erh(u) Cambrian - Riley Formation - Hickory Sandstone Member - Upper (Red) Unit
- Erh(m) Cambrian - Riley Formation - Hickory Sandstone Member - Middle Unit
- Erh(l) Cambrian - Riley Formation - Hickory Sandstone Member - Lower Unit
- pEtm PreCambrian - Town Mountain Granite

- Known and inferred fault U, upthrown side, D, downthrown side
- Approximate location of zero saturated thickness of the Hickory Aquifer in 1987. The Hickory Sandstone is not saturated on the triangle side of the line.
- Approximate location of major ground-water "flow channel" in Hickory Aquifer in 1987. Consists of joined arrows indicating approximate direction of ground-water flow in the Hickory Aquifer in 1987.
- Arrow indicating approximate direction of ground-water flow in Hickory Aquifer in 1987.
- Approximate location of local ground-water divide.

- Location of existing irrigation wells in 1987.
- 916 Last three digits of state well number(s) of selected irrigation well(s) to be used in recommended infiltration tests of stream beds.
- 52 Approximate depth to 1987 Hickory water level or base of Hickory Aquifer in feet.
- Location of existing retention dam and lake.
- Approximate location of proposed retention dam and lake.
- D Letter identification of existing or proposed retention dam and lake.

- Arrow indicating direction of flow in stream bed from existing or proposed retention dam and lake for recharge of the Hickory Aquifer.
- Approximate location of proposed pipeline to be used to divert flow from retention dam and lake to stream bed for recharge of Hickory Aquifer.
- dfp Diversion of flow to pipeline.

- Areas most favorable for beneficial artificial recharge of the Hickory Aquifer
- 1 Area having greatest favorability
- 2 Area having less favorability than 1
- 3 Area having less favorability than 1 or 2



Reach of Katemcy Creek receiving ground-water discharge from the Hickory Aquifer in 1987

Estimated location of beginning of ground-water discharge to Katemcy Creek from the Hickory Aquifer in 1987

MCCULLOCH COUNTY
 MASON COUNTY

FM 1222

FM 1222

FM 1222