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M E M O R A N D U M

December 12, 1980

TO: Files

FROM: Jim Thornton *just*

SUBJECT: Suspected Animal Waste Pollution Affecting Burley Lagoon

DATE: December 1, 1980

Background: Chuck Carelli discussed with me a continuing water quality problem in Burley Lagoon (an extension of Henderson Bay, near the town of Purdy and paralleling Highway 16). High bacteria counts have resulted in DSHS closing a major part of the lagoon to oyster growing. Animal waste is among several of the suspected sources and Chuck asked that I take a look at the area to see if I could locate any confined animal feeding operations. Information I obtained might be useful to Dick Cunningham since he is preparing a monitoring program for the lagoon.

Setting: Burley Lagoon is generally a north south lying salt water lagoon affected by daily tidal action. Burley Creek (freshwater) enters from the north end and Purdy Creek (freshwater) enters the lagoon near the southerly end. Highway 203 crosses the south end of the lagoon where it enters Henderson Bay. The highway is on a causeway extending three-fourths of the way across the lagoon limiting the flushing action in the lagoon.

The northern third of the lagoon lies in Kitsap County while the southerly two thirds are in Pierce County. Burley Creek drainage is in Kitsap County while half of Purdy Creek lies in Pierce County.

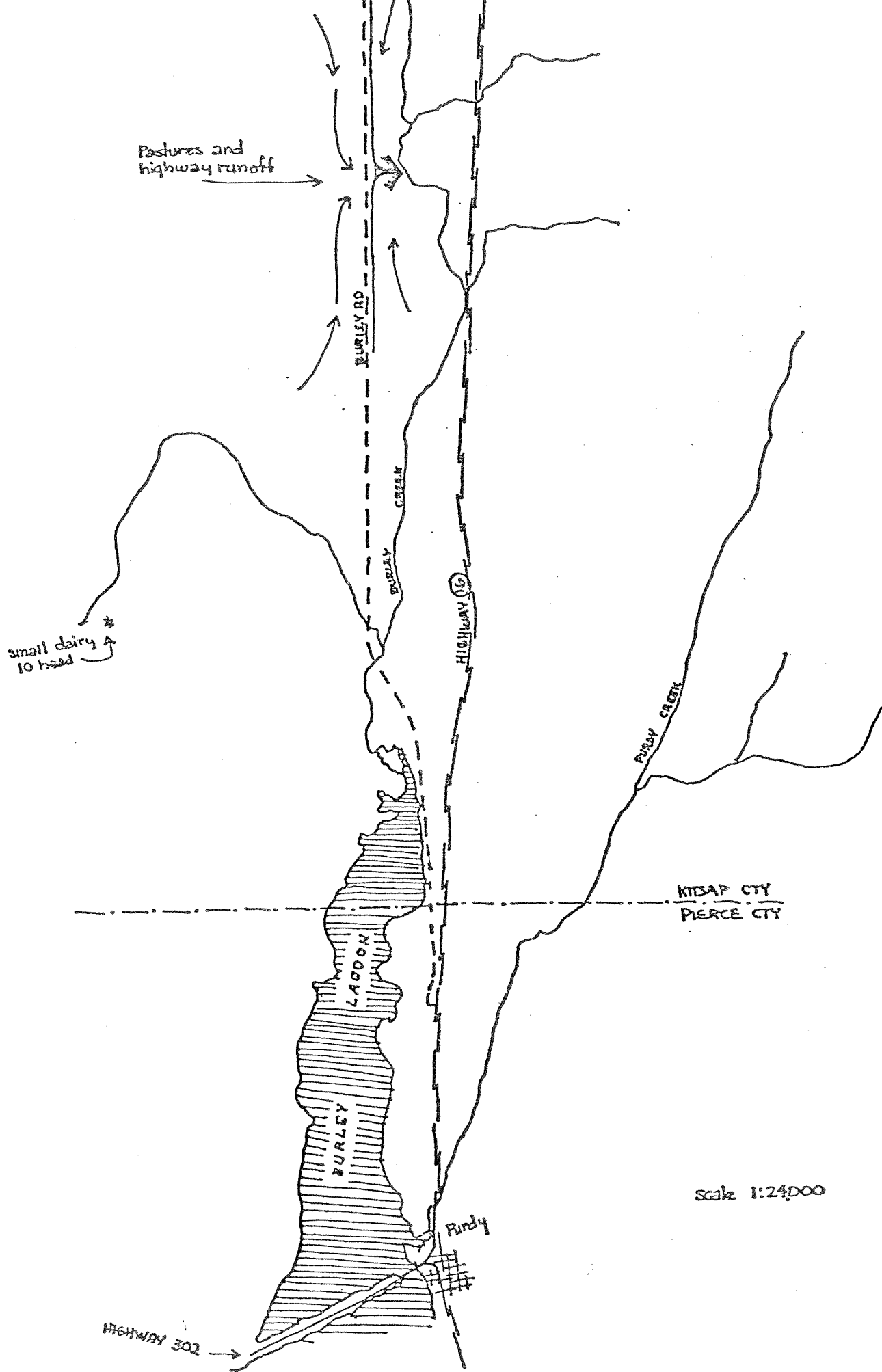
Observations: I met with Miles Raver, the Kitsap County District Conservationist on Tuesday, November 25. We toured the southern portion of the Burley Creek drainage and all of the Purdy Creek drainage. Miles explained that most of the land use in that area is limited to small farming and wood lot owners. Most landowners are in the five to twenty acre size. In the Burley Creek drainage, there were many small farms with five to fifteen cattle per farm. While driving along Burley Road (which parallels Burley Creek, I noticed that drainage ditches on both sides of the road had a heavy flow of water in them. About 2 1/4 miles north of the lagoon, the drainage on the east side of the road turned east through pastures presumably emptying into Burley Creek. It appears that the ditches along side Burley road catch the runoff or actually drain many of the pastures in the area.

Overall, however, it is apparent that the area is under a lot land development pressure and although most soils types in the area are not suitable for septic

tanks, most if not all, residences rely on them. In addition, Burley Creek is bordered on both sides by highways and although I didn't thoroughly check it out, I suspect all highway runoff goes to the creek.

In conclusion, I did not find any one single source (in my estimation) that could be a major contributor to Burley Lagoon. The one drainage ditch from Burley Road, through the pastures, to the creek might collectively from the surrounding area be contributing significant amounts of animal waste to the creek.

cc: Chuck Carelli
Miles Raver, D.C. Kitsap County



Pastures and highway runoff

small dairy 10 head

KISAP CTY
PIERCE CTY

Scale 1:24,000

