

SACKETT SITE

ORIGINAL

5/15/08 - EXAMINED USFS AERIAL PHOTOS @ PRIEST LAKE RANGE DISTRICT
693 K 32
694 K 32

WETLAND APPEARS TO EXTEND CONTINUOUSLY FROM NORTHERN LIMIT
(AS SHOWN ON 1996 PRIEST LAKE SW USGS QUAD) TO PRIEST
LAKE; 1 TRAIL IN APPROXIMATELY SAME LOCATION
AS LAKEFRONT ROAD; SHOULDER BEACH APPEARS TO
CONSTRICT WETLAND TOWARD WEST
(PHOTOCOPIES OF EACH)

5/15/08 - AT SACKETT SITE, 12:30 PM

ALL PORTIONS OF SITE WHERE NATIVE SOIL REMOVED BUT
FILL NOT PLACED ARE INUNDATED / PONDED; WATER LEVEL
ALONG EAST SIDE OF FILL APPEARS HIGHER (6-12")
THAN WATER SURFACE ELEVATION ALONG WEST SIDE
OF FILL (i.e., INUNDATED ALONG EAST; PONDED / SATURATED
TO SURFACE ALONG WEST)

GROWING SEASON - GREEN UP, LEAF OUT
WETLAND NORTH OF KALISPELL BAY ROAD

- INUNDATED 1-2'
- SUBSTANTIAL (5-10? CFS) FLOW THROUGH OUTLET
STREAM ALONG NORTH SIDE OF ROAD TO
KALISPELL CREEK
- BEAVER ACTIVITY IN CREEK
- TROUT (14-15" BROOK TROUT?) NEAR UPSTREAM END OF
OUTLET STREAM
- WATER SURFACE ELEVATION ON NORTH SIDE OF ROAD
APPROXIMATELY 2' BELOW ROAD SURFACE
- WILLOW, DOGWOOD, SPIREA - DOMINANT SPECIES
- OBSERVED YELLOW WARBLER, SWALLOW
- HEARD FROGS

WATER SURFACE ELEVATION SOUTH OF ROAD APPROXIMATELY
3' BELOW ROAD SURFACE

NO CULVERTS OR SURFACE FLOW FROM NORTH SIDE TO
SOUTH SIDE OF ROAD; NO PREVIOUS SIGNS OF
SEEPAGE ON SOUTH SIDE OF ROAD ABOVE WATER
SURFACE ELEVATION

SOUTH SIDE OF SACKETT WETLAND - OLD SCHNEIDERS ROAD

- PONDING ALONG ROAD, ESPECIALLY ALONG SOUTHWEST CORNER OF SACKETT SITE
- NO OBVIOUS SURFACE FLOW FROM WETLAND TO LAKE
- DIRECTLY SOUTH OF WETLAND - EASEMENT AREA TO LAKE (IMMEDIATELY WEST OF TAN HOUSE W/ RED ROOF) - HOUSE # 178
- LAKE ELEVATION APPEARS \approx 2' BELOW NORMAL POOL (DAM AT OUTLET RAISES WATER SURFACE ELEVATION ABOUT 3 FT - MIKE DOHERTY, CORP OF ENGINEERS)
- 2 DRAINAGE PIPES - SMALL (6" DIAMETER ?); ONE FLOWING 2-3 (?) GALLONS PER MINUTE DIRECTLY INTO LAKE
- LAKE ELEVATION ABOUT 8-10' BELOW WETLAND ELEVATION

MET MIKE DOHERTY, CORP OF ENGINEERS (COEUR D'ALENE REGULATORY OFFICE, WALLA WALLA DISTRICT) AT SITE. MIKE HAS WORKED IN THAT OFFICE SINCE 1984 COVERING THE IDAHO PANHANDLE. MIKE HAS MORE EXPERIENCE IN WETLAND IDENTIFICATION & ASSESSMENT, AND OBSERVATIONS / KNOWLEDGE OF WETLAND HYDROLOGY IN NORTHERN IDAHO THAN ANYONE ELSE.

MIKE'S UNDERSTANDING OF ECOLOGY / HYDROLOGY OF SACKETT WETLAND AND SURROUNDING AREA:

- OUTLET STREAM WAS CONSTRUCTED ALONG NORTH SIDE OF KALISPELL BAY ROAD AND APPEARS TO BE PERENNIAL
- OUTLET STREAM AND ITS ADJUTING WETLANDS HAVE IMPORTANT FUNCTIONS TO KALISPELL CREEK AND PRIEST LAKE DUE TO:
 - FISH MOVEMENT FROM / TO LAKE (POTENTIALLY ADFLUVIAL WESTSLOPE CUTTHROAT TROUT AND/OR BULL TROUT)
 - CONTRIBUTES BASE FLOW TO KALISPELL CREEK W/ FISHERIES BENEFIT TO CREEK AND LAKE
 - PROVIDES INVERTEBRATE INPUTS
 - WATER QUALITY BENEFITS (SEDIMENT RETENTION)
- SACKETT WETLAND WAS CLEARLY PART OF ONE WETLAND SYSTEM WITH THE WETLAND NORTH OF KALISPELL BAY RD DUE TO LANDSCAPE POSITION AND VEGETATION COMMUNITY;

WITHOUT ARTIFICIALLY CONSTRUCTED CHANNEL, ENTIRE DRAINAGE / WATERSHED FLOW (SEVERAL SQUARE MILES?) WOULD HAVE FLOWED OUT OF SOUTH END OF SACKETT WETLAND TO PRIEST LAKE (LOWEST ELEVATIONS) - EVEN WITH KAUSPELL BAY ROAD AFFECTING SURFACE FLOW, IT IS CLEAR THAT SHALLOW SUBSURFACE FLOW IS OCCURRING BETWEEN THESE WETLANDS BECAUSE:

- (1) WETLAND PLANT COMMUNITY PERSISTS SOUTH OF KAUSPELL BAY ROAD AND APPEARS TO HAVE BEEN SAME COMMUNITY TYPE
- (2) DRAINAGE AREA INTO SACKETT WETLAND WITHOUT AREA NORTH OF KB RD IS INSUFFICIENT TO PROVIDE AMOUNT OF WATER SUFFICIENT TO PROVIDE WETLAND HYDROLOGY; HILL SLOPE TO EAST ALLOWS ONLY SEVERAL ACRES OF DRAINAGE TO SACKETT WETLAND
- (3) UNDERLYING SANDS AND GRAVELS FROM GRANITIC OUTWASH UNDERLY THE STREAM VALLEYS AROUND PRIEST LAKE; THE HIGH PERMEABILITY OF THESE SOILS PROVIDE SUBSTANTIAL SHALLOW SUBSURFACE FLOW.

- SACKETT WETLAND IS ADJACENT TO A RELATIVELY PERMANENT WATER (OUTLET CHANNEL); SACKETT WETLAND AND ALL OTHER WETLANDS ADJACENT TO OUTLET STREAM (FROM ITS MOUTH AT KAUSPELL CR UPSTREAM TO WHERE 2 BRANCHES JOIN), HAVE SIGNIFICANT NEXUS TO PRIEST LAKE (THROUGH KAUSPELL CREEK)

- PRIEST LAKE IS TAW (CONSISTENT W/ PREVIOUS COE JOBS AROUND LAKE AND BASED ON INTERSTATE COMMERCIAL USE ON LAKE AND NAVIGATION - IN FACT WITH COMMERCIAL USES (BOAT RENTALS, FISHING GUIDES, PUBLIC CAMPGROUND AND BOAT RAMPS, PRIVATE MARINAS, ETC.)

- SPECIFIC HYDROLOGIC CONNECTIONS OF SACKETT WETLAND TO OTHER WATERS:

- (1) SHALLOW SUBSURFACE FLOW TO PRIEST LAKE DUE TO ELEVATION GRADIENT, UNDERLYING SOILS, AND FLOW GRADIENT FROM NORTH OF KB RD FOLLOWING

HISTORIC FLOW ROUTE TO LAKE (PER 1932 USFS
AERIAL PHOTO)

- (2) POSSIBLE HYDROLOGIC CONNECTION TO OUTLET CHANNEL
NORTH OF KP RD IF FLOW / WATER LEVEL NORTH
OF KB RD SO LOW (PERSISTENT DROUGHT) THAT
OUTLET CHANNEL ACHED TO DRAIN WETLANDS NORTH
AND SOUTH OF ROAD THROUGH SHALLOW SURFACE
FLOWS

INFLUENCE OF SACKETT WETLAND TO PRIEST LAKE

THROUGH SHALLOW SUBSURFACE FLOW DIRECTLY TO LAKE:

- WATER QUALITY IMPROVEMENT (RUNOFF TO WETLAND
FROM ADJOINING AREAS IS IMPROVED THROUGH SEDIMENT
RETENTION AND NUTRIENT UPTAKE BEFORE MOVING
THROUGH SHALLOW SUBSURFACE FLOW TO LAKE)
- RETAINS RUNOFF AND UPSTREAM SHALLOW GROUNDWATER FLOW
DURING HIGHER FLOWS AND RELEASES IT SLOWLY TO
PRIEST LAKE (FLOW ATTENUATION)

MIKE STATED THAT THERE ARE RELATIVELY FEW OF THESE TYPES
OF WETLAND SYSTEMS AROUND THE ENTIRETY OF PRIEST
LAKE

WEATHER - DRY, SUNNY, 70° (WARMEST DAY YET THIS YEAR PER MIKE D.)

SITE CONDITIONS - NO SNOW ON SITE

- INUNDATION) PONDING LIMITED TO WETLAND AREAS

- UPLAND AREAS DRY