Through the Nookachamps reach, the Skagit River now exhibits a relatively low-sinuosity single-thread channel planform, though formerly the river exhibited a more complex meandering pattern characterized by scroll-and-swale topography, oxbow lakes, and cut-off meanders. In 1872 Nookachamps Creek joined the Skagit River through an abandoned meander of the main-stem Skagit River, but now the creek directly empties into the Skagit River. The same GLO map shows the course of the East Fork Nookachamps Creek prior to its being channelized and moved to its current position (Figure 3).

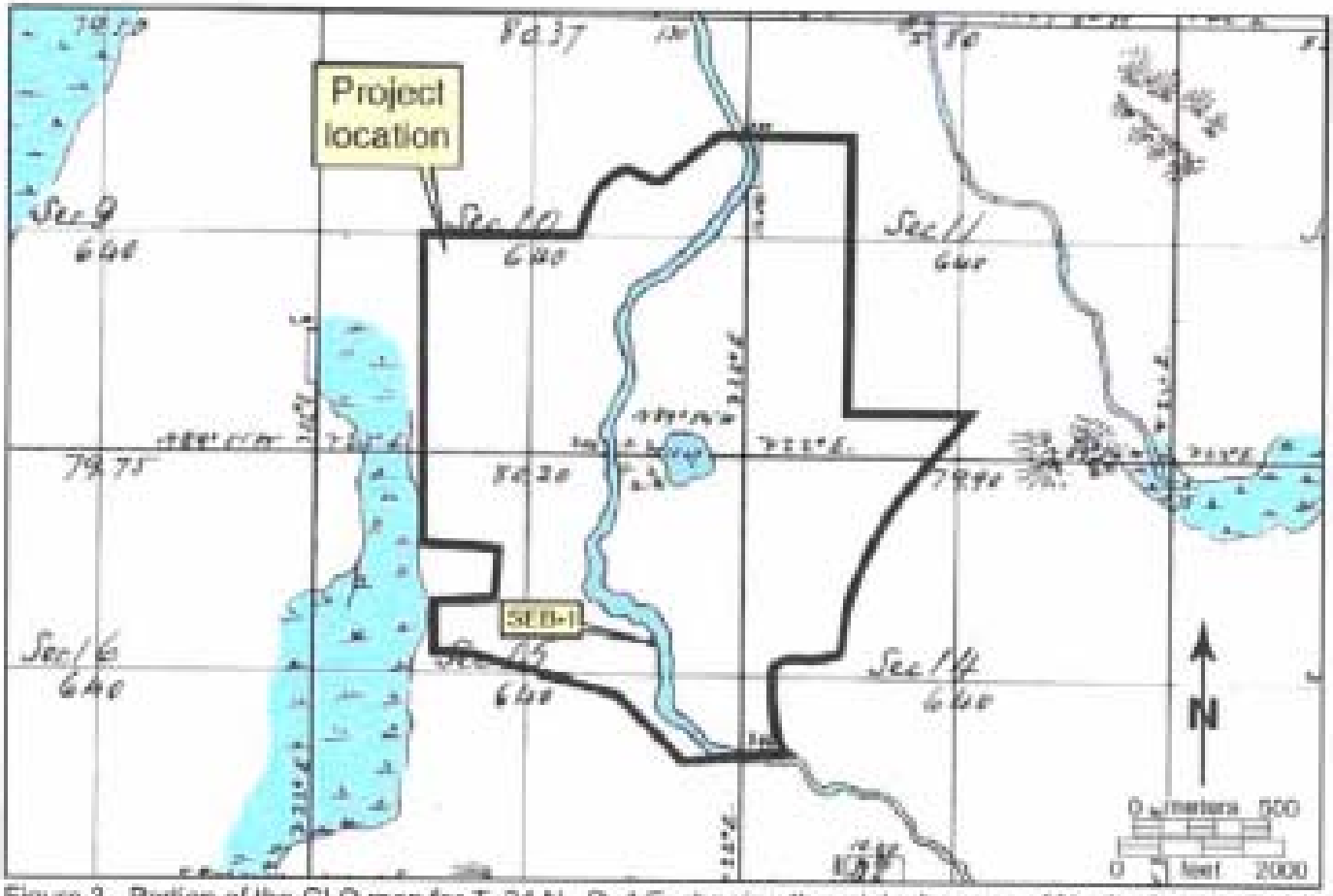
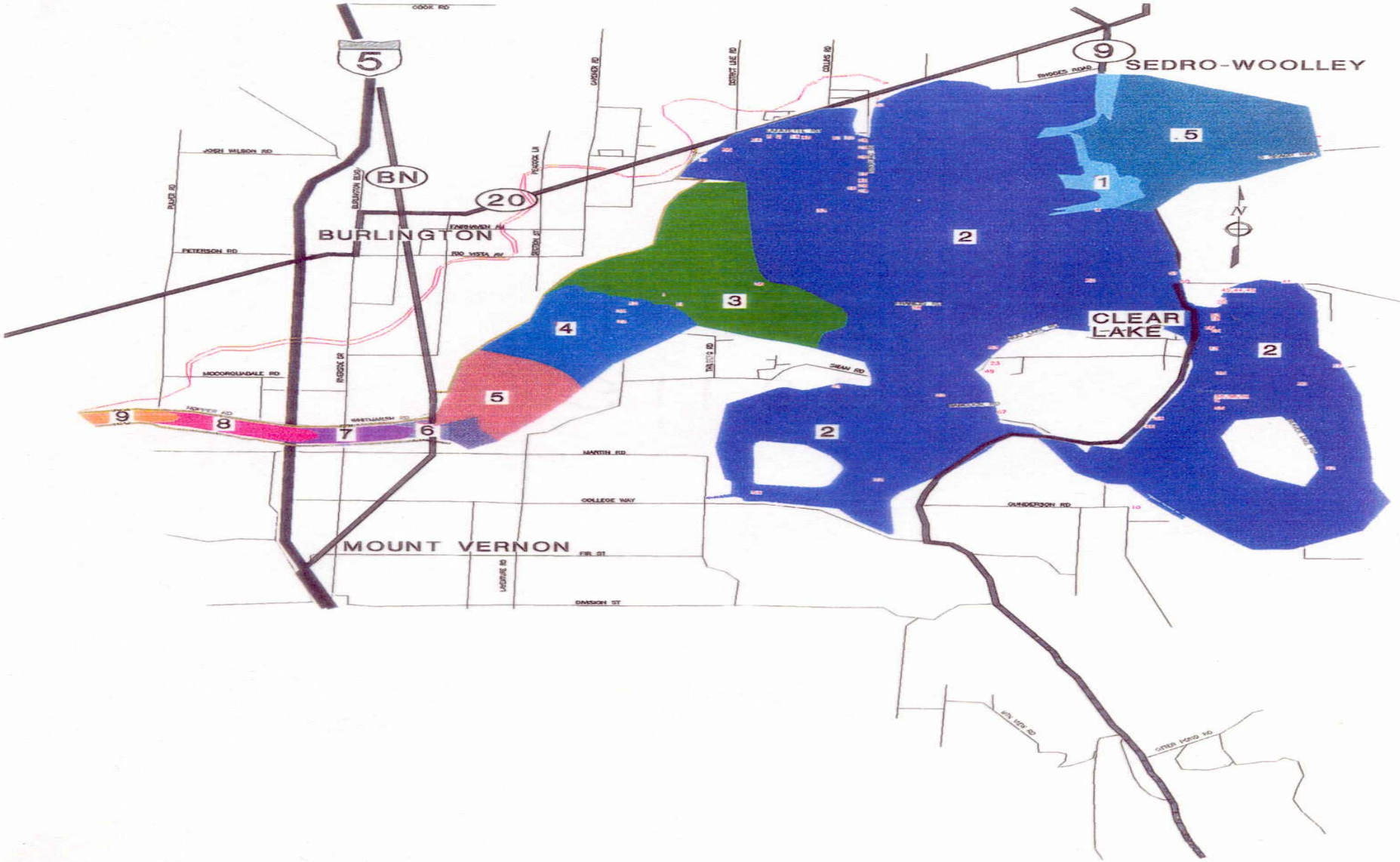


Figure 3. Portion of the GLO map for T. 34 N., R. 4 E. showing the original course of Nookachamps Creek through the study area, 1872.


LYMAN
SEDRO WOOLLEY
STERLING
BURLINGTON
CLEAR LAKE
NOOKACHAMPS
AVON
MT. VERNON
FIR ISLAND
CONWAY
SKAGIT
RIVER
VALLE
Section maps originally prepared by:
Dept. of the Interior, General Land Office, Surveyor Generals Office, Olympia, Washington Territory
Surveyors began on Fir Island in 1866 and finished up with the Sauk River Valley in 1885.
This map is a compilation of the GLO's work and was researched and developed by Skagit County residents Larry Kunzler and Leonard Halverson, May, 1994
Map reproduction may be purchased by contacting:
Superior Reprographics
1933 5th Ave
Seattle, WA 98101
443-0800
MAP LEGEND
SKAGIT, SAUK, SUIATTLE, SAMISH RIVERS, LAKES, TRIBUTARIES & DISTRIBUTARIES
WETLANDS
DIKES AND LEVEES
CITIES AND TOWNS
SETTLERS AND INDIANS
APR 24 2005


CONCRETE
ROCKPORT
1866–1885
APR 24 2005

GRAPHIC SUMMARY OF INCREASES IN 1990 FLOOD LEVELS DUE TO LEVEE SYSTEM



HYDRAULIC ANALYSIS DEFICIENCIES

- Applicant used low, moderate and heavy “effects” or flows for its modeling
- “Low” flows were confined to Nookachamps Creek
- “Moderate” was Phase 1 flooding of the Skagit River (67,400 cfs or Mt. Vernon gauge 28 feet NGVD 29 datum)
- “Heavy” was the 100 year flood for Skagit at elevation 47.7 NAVD 88 datum (or 43.9 NGVD 29 datum).

HYDRAULIC ANALYSIS DEFICIENCIES

- A Phase 1 flood is a 2 year event, however the lower flows still impact the project site like those experienced between June 29th and July 6th as shown in exhibit #22.
- We just experienced a backwater event with a maximum flow on the Skagit of 64,000 cfs which is below a 2 year event and yet we saw the results which were:

(In front of Larry Gadbois house on Babcock Road)

Photo Thursday, July 3rd at approximately 11:30 AM by Allen Rozema

(Swan Road looking at Nookachamps)

Photo Thursday, July 3rd at approximately 11:30 AM by Allen Rozema

(From Mud Lake Road of Swan Road)

Photo Thursday, July 3rd at approximately 11:30 AM by Allen Rozema

(Project Site from SR 9 #1)

Photo Thursday, July 3rd at approximately 11:30 AM by Allen Rozema

(Project Site from SR 9 #2)

Photo Thursday, July 3rd at approximately 11:30 AM by Allen Rozema

HYDRAULIC ANALYSIS DEFICIENCIES

- At the time the pictures were taken, again according to exhibit #22 the Skagit was running at :

Date/Time	Gage	cfs
07/03/2008 11:00	24.83	58,100
07/03/2008 11:15	24.84	58,100
07/03/2008 11:30	24.85	58,200
07/03/2008 11:45	24.85	58,200
07/03/2008 12:00	24.87	58,300

HYDRAULIC ANALYSIS DEFICIENCIES

- This was down from the peak of the event the day before:

Date/Time	Gage	cfs
07/02/2008 16:00	25.68	63,800
07/02/2008 16:15	25.70	63,900
07/02/2008 16:30	25.69	63,800
07/02/2008 16:45	25.71	64,000
07/02/2008 17:00	25.70	63,900

HYDRAULIC ANALYSIS DEFICIENCIES

- In reviewing Exhibit #22 it can be determined that the Skagit ran above 60,000 cfs for a period of 17 hours (July 2nd 0900 – July 3rd 0200)
- It can also be determined that the Skagit ran above 50,000 cfs for almost 5 ½ days.
- Flows varied from between 32,000 cfs and 64,000 cfs for over 7 days.

HYDRAULIC ANALYSIS DEFICIENCIES

- The importance of this discussion is that at some point between those dates the site and its conceptualized improvements went underwater and their presence would impact flooded areas, depths and perhaps even velocities.
- There is no discussion or analysis of anything lower then a 2 year event on this project proposal so we do not know what the impacts of the project is going to be on those flows.
- There is no analysis of the impacts of repeated siltation on the effectiveness of the proposal or the ELJ's.

HYDRAULIC ANALYSIS DEFICIENCIES

- The applicant admits the following: *When the Skagit is flooding, its hydrology overwhelms any effect of modifications in the Nookachamps Creek basin.* (Page 16)
- The applicant further admits *the Skagit River inundates the project site on a regular basis.* (Page D-25)
- Yet the applicant does not define flooding except for the Phase 1 67,400 cfs 2 year event.
- At what point (i.e. flows, as in cfs from the Skagit) does the localized onsite flooding turn into off-site flooding? That question is never addressed for the lower flows.
- Clearly this is an inadequate analysis.

HYDRAULIC ANALYSIS DEFICIENCIES

- The applicant states: *The site regrading will increase the existing wetland areas, resulting in greater flood storage capacity when there are no backwater conditions in the Skagit River.* (Page D-37)
- In short there is absolutely no benefit to the surrounding property owners or to Skagit County from this project with respect to **any** flood event from the Skagit River.

HYDRAULIC ANALYSIS DEFICIENCIES

- The applicant states: *Most of the Bank is located within the 100-year flood plain of the main stem of Nookachamps Creek and the East Fork of Nookachamps Creek, both of which are reaches of the Lower Skagit watershed.* (Page 7)
- After checking with FEMA and the Corps of Engineers to be sure, there has never been a determination of what the 100-year floodplain is of Nookachamps Creek.

RECREATIONAL DEFICIENCIES

- Nowhere in either the SEPA checklist nor the county MDNS is there any discussion of the recreational aspects of Nookachamp Creek.
- No mention of the Creek being utilized by Largemouth Bass.
- No mention of individuals using their boats in Nookachamps Creek.

THE MOUNT VERNON ARGUS

SEPTEMBER 3, 1925.

SKAGIT COUNTY LEADS NATION IN SOIL TEST

Seven - Year Government Probe Brings District Handsome Tribute.

FROM GUNDERSON FARM

First Seven and Last Two Out of Twelve Won Locally; Gunderson Farm 100 Per Cent.

The United States government has just admitted that Skagit county is the finest farming community in the nation, bar none!

In a series of soil tests extending over the past seven years, which has just been completed, Skagit county soil won nine out of 12 points. An assay of soil taken from the Gunderson estate, south of Clear Lake, was found to be 100 per cent perfect for general agricultural purposes. It was the only soil given a perfect rating.

Analysis of soil in this district took first seven places in the nation, the Cumberland valley, in Maryland, took the next three, and this county took the next two.

The tests were conducted by the United States department of agriculture.

Announcement of the result of the test was made to the Rotary club, Tuesday, by Robert Lord, of the Northwest Implement Co., during a classification talk on farm implements. It was greeted with enthusiasm by the Rotarians, all of whom already knew that this was the finest country in the United States, but who didn't realize how fine it was. Mr. Lord said he got his information from C. I. Hall, who in turn got it from a federal land bank official. The results of the test have not yet been officially announced as yet by the department of agriculture.

The county will receive some invaluable advertising from the test, the results of which will be broadcasted throughout the country.

Mr. Lord gave an extremely interesting talk, tracing the evolution of farm implements, from their crude beginnings to the present.

In a series of soil tests extending over the past seven years, which has just been completed, Skagit county soil won nine out of 12 points. An assay of soil taken from the Gunderson estate, south of Clear Lake, was found to be 100 per cent perfect for general agricultural purposes. It was the only soil given a perfect rating.