Lesson Seven

Objectives Match:
Physical Setting of California and
Modern California: Immigration,
Technology and Cities

Era Match: Pre-history - Present day

MOVING ON THE BAY

Look closely at a map of San Francisco Bay. Now imagine that you could erase all the roads and rail lines. Imagine also less towns and cities and those that are left are smaller, much smaller. You now have a mental picture of the Bay Area in the 1850's. How do you move fruits and vegetables from the Central Valley to the major towns? How do you travel from San Francisco to Vallejo? How do you bring lumber to town mills and yards from the forested lands of Marin? By water, of course.

The Bay (actually an interconnected group of bays which include San Pablo, Suisun, and San Francisco), the Delta, the San Joaquin and Sacramento rivers all provided the area with a natural 'highway' system before any roads, bridges, and railroads were developed.

How important would boats have been in the 1800's? Specialized boats for carrying products and people were central to the towns of the Bay. San Francisco Maritime has important examples of these including a ferry boat like the *Eureka*, scow schooners (flat bottomed transport sail boats) like the *Alma*, and small boats like the *Otto* (a whitehall type rowing boat).

Purpose: Students will explore the idea behind water as a means of moving people and things. The importance of the Bay system to the development of the region will be the primary focus.

What Students Will Do:

- students will create a layered map of the Bay area showing the distribution and the chronology of transportation and development
- students will discuss the changes in transportation of the Bay region over time

What to Know:

The influence of water on human settlement in California goes back to the first peoples to inhabit the area. Native villages were concentrated on the coast and along most river courses. Many of our major metropolitan areas are built over the sites of Native settlements, and this coincidence is no accident.

Direct access to a navigable water course was essential in the development of early European settlements. It is harder today to see this link because of the network of roads, railroads, and airports which give us relative independence from the sea.

Using the layered map your students will be able to see why our major communities developed where they did, and how railroads, ferries, roads and bridges evolved to serve them.

Activity 1:

materials: copies of map layers, transparency film (for plain paper copiers), colored markers, a variety of maps of the Bay Area, tracing paper, masking tape, overhead projector

Use map 1 as your base map. Make a copy of the maps on transparency film for use with the overhead projector. Make enlarged copies of the base map and layers for students to trace.

Hand-out a full set of maps and layers to each cooperative group. Assign a student to trace a different layer and a base map. Students should tape the copy onto the table with masking tape. Have them tape the tracing paper securely over the copy. It is important that their work does not shift during the tracing.

Be sure that students include in their tracing the line-up target on the lower-left side which looks like this:



Color the water on the base map with a light blue marker (a dark color will hide details on the layers you place on it later).

When all the layers are ready, place them in order on top of the base map making sure to align the targets. Tape each layer down securely.

Using a road map of the Bay Area compare it to the layered map. Be sure to locate the features highlighted by the layers they traced: *major highways* and bridges, railroads, ferry terminals, bays and rivers, and cities and towns.

With all the layers in place begin the following discussion:

How many of you have traveled to Sacramento?

How did you get there?

How else could you have gotten there? (look at the map)

Make a list on the board of student responses.

Fruits, vegetables, and hay are grown in the Central Valley in the area near Sacramento. How would you get these products to market in San Francisco?

Make a second list of student responses.

Now using the chronology and timeline provided begin to remove a layer at a time and discuss some of the same questions as above.

When only the cities and towns layer remains on the base map you will be looking at the Bay Area before 1850. Tell students about the importance of the bay and rivers as a way to move about.

What were the obstacles when traveling by land? Forests, wetlands, and mountains made travel by land difficult. A well-worn network of trails did

exist for countless hundreds of years, and were used for foot travel as well as horse trips after European's arrived.

Water travel could get around many of the barriers mentioned above, but it also posed some hazards. Wind, waves, and currents were the major factors when using the bays and rivers.

Looking at a modern map, guess which communities would not exist (or were very small) before railroads and roads were around.

Towns such as Davis and Vacaville are far from any river access and did not develop until a rail line was built through the area.

Give students an opportunity to create imaginary trips between Bay Area communities.

How would you transport a load of bricks from Santa Rosa to San Francisco in 1865? How about in 1900? Today?

Journal Reflections:

- What would it have been like to travel between San Francisco and Sacramento before airplanes, cars, or railroads were developed?
- Write an imaginary account of a trip between your town and San Francisco in the 1850's (if you are in San Francisco, have students choose another town, maybe one where a relative lives)