## Lesson Plan 7: GIS Week 4 – Human Condor Connection

Unit Question: What role does the California condor play in the California ecosystem, and how do changes in the ecosystem impact condors over time?

Science and Engineering Practices:

- Developing and Using models
- Asking Questions

Teacher Prep: Have google earth application downloaded on student computers/tablets. Have the GPS data shared, or ready to share with students.

**Lesson:** (Two class periods)

**Warm up:** Watch FWS Biologist Joseph Brandt enter a condor nest in the wild. Have students write what they wonder on post it notes for the question board.

## 1. Ask students to keep this question in mind as they do the GIS activity:

Guiding Question: Where could condors interact with humans? How might they interact with each other?

- Direct vs Indirect Impacts: identify in next lesson
- Positive vs Negative Impacts: identify in next lesson

## 3. Using a GIS – Google Earth (Week 4 Data)

- Guiding Question: How could condors and humans interact, and where do you think they would interact? How could they impact each other?
- Have students use their GIS Datasheets
- Have them collect data for their assigned condor for Week 4.
- Teacher will enter the student's data into the <u>Teacher Database</u>. Or have a student representative from each group enter the data into the Teacher Database.
- After the activity, have students write 1-2 additional questions that they have (based on what they
  observed from the GIS activity) on Post-Its. Have students add their questions to the question board.
- **3. Reflection** Based on what you observed today, where might condors have interacted with humans this week?
  - Have students write or draw their reflection. This should be a personal exercise and sharing should not be expected.

## Extend (optional)

Read the <u>Chumash "Rainbow Bridge" Creation Story</u> – Discuss how the legend describes real characteristics of the condor. What is described? Have students write a "legend" about how an animal of their choice got to be the way it is today. They story should have at least 3 components: 1. how it was before? 2. What happened? 3. How did this event make the features we see today? Stories should include illustrations!

**Student Example**: Giraffes used to have short necks, until one day people showed up and started cutting all the trees down. The giraffes went and screamed for the people to stop, but they would not. The people cut the trees more and they fell into the screaming giraffe's mouth and gave them the long necks we see today.