## R. Rhoads (Rody) Stephenson

## Comments on Devil's Gate DEIR

12/1/2013

- 1. This project needs to be coordinated with four other activities going on in and around the Arroyo.
  - a. Pasadena's West side project (Flint Canyon and the West trail).
  - b. Pasadena's Arroyo water intake project (up the Arroyo near the ranger station.)
  - c. The reclamation of the JPL East Parking lot.
  - d. The JPL parking garage including restoration of West side trail by the JPL fence.
  - e. The CEQA process requires looking at cumulative impacts.
- 2. Is 2.0 DDE of sediment removal really required? Try to minimize this.
  - a. 2.0 DDE seems to have been pulled out of the air without an analysis of flood probabilities.
  - b. Do a careful analysis of flood flow statistics and debris statistics and try to minimize the amount of sediment that must be removed. See Appendix A.
  - c. 1.0 DDE (or 1.5) would be better than 2.0
- 3. Limit the annual removal to 200,000 cu yards or less per year.
  - a. Take longer to get to the target reservoir capacity.
- 4. Hours of operation
  - a. Start trucks AFTER school starts for grades 7 and 8 and High School
    - a.i. An 8:30 AM start would be much better than 7 AM.
  - b. Consider JPL traffic patterns as well
  - c. Consider 12 hours days on Saturday and Sunday and shorter days during the week
    - c.i. You might survey residents on this.
  - d. Consider the timing of traffic jams on the 210 especially the 2 lane connections both Eastbound in the afternoon (through the tunnel) and Westbound in the morning.

- d.i. Travel times to Irwindale will be much longer after 3 PM
- d.ii. The 210 doesn't need any additional traffic during rush hours.
- e. Question: What is the estimated round trip time at various times of the day? Consider doing an experiment.
- f. Question: How many trucks will be required?
- g. Question: Where will the trucks be parked at night?
- h. Question: What will you do to prevent long queues of trucks waiting to be loaded? Prevent idling.
- 5. Use the Alternate Haul Route back across Woodbury
  - a. Do not allow trucks on Berkshire in either direction.
- 6. Use low-emission trucks
  - a. EPA 2007 is not good enough. Use at least EPA 2010.
  - b. Use latest EPA or CARB emissions standards whichever is more stringent
    - b.i. Should include SCR and DPF at a minimum
  - c. Or use the emission standards that have been implemented at the ports.
  - d. Require Natural Gas or other Low emission fuels.
- 7. Noise considerations:
  - a. Ban Jake Brakes on the downhill road into the Arroyo
  - b. Plan routes in the Arroyo to avoid the need for the trucks to back-up
    - b.i. That will avoid the "beep" "beep" "beep" warnings
- 8. The mitigation measures are wholly inadequate. 6 of 7 items do zero mitigation.
  - a. Activities like "plan" "survey" "monitor" provide useful baselines but do not accomplish actual mitigation.
  - b. Use configuration C with habitat left in the middle
- 9. Consider reducing the number of settling ponds on the East side in order to mitigate the loss of habitat from the sediment removal area.
  - a. Can you find 70 acres to offset the loss of habitat in the removal area?

- b. Work with Pasadena to let some of the existing or new settling ponds revert to natural habitat.
- c. Consider keeping the sediment in Johnson Field and letting it revert to natural habitat.
- 10. Consider a permanent shallow lake near the dam
  - a. This will greatly improve the aesthetics.
  - b. This will attract waterfowl.
- 11. Consider a conveyor system (horizontal transport) plus two lifting portions so that trucks can be loaded on the Woodbury Bridge.
  - a. This will reduce dust, noise, and air pollution going uphill.
  - b. Will keep most trucks out of the Arroyo
  - c. Will alleviate the invasive species problem on tires
- 12. Question: Will sluicing (FAST) damage the only soft bottom part of the Arroyo South of the Rose Bowl?
  - a. Isn't the rest of the channel to the LA River convergence all concrete?
  - b. Will sluicing result in the need for more sediment removal downstream?
- 13. For the Eastern access road into the Arroyo, try to save the large Oak trees on Woodbury
- 14. We have a choice of a small surface area and deep versus a large area and shallower.
  - a. I prefer small surface area and deep 70 acres or less
- 15. Do not pump water from the Arroyo to Eaton Canyon. Pump the water into the Pasadena settling ponds and keep it in the Arroyo.

Summary:

- 1. Reduce volume that must be removed
- 2. Reduce acreage that is denuded
- 3. Try to find areas that can be converted to native habitat true mitigation
- 4. Use natural gas or other low emission trucks
- 5. Do not start trucks before 8:30 AM. Reduce hours of operation.
- 6. Stretch out removal period to 10 or 20 years.
- 7. Use alternative haul route stay off Berkshire.
- 8. Use configuration C.

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## Appendix A

- 1. The whole purpose of the dam and this project is to reduce the probability of downstream floods.
- 2. The Draft EIR does not present any analysis for the amount of reservoir capacity needed.
- 3. 2.0 DDE was arbitrarily selected. You may be able to do with less removal.
- 4. I suggest you do an in-depth analysis and prepare a graph similar to the attached sketch on Page 5.
  - a. Y-axis Probability of flood over the next 50 years.
  - b. X-axis Reservoir capacity in million cu yards
  - c. Plot 4 different lines depending on how long you take to remove the sediment
    - c.i. One-year as if the sediment could magically be removed in one year (2015).
    - c.ii. 5 years starting in 2015
    - c.iii. 10 years
    - c.iv. 20 years
  - d. A Monte Carlo simulation may be useful
  - e. The attached sketch is sample data just a guess what the curves will look like.
    - e.i. Please replace with real statistical analysis results.

## 5. Assumptions

- a. "Flood" should be defined as over-topping of the concrete channel somewhere between the dam and the LA River Convergence.
- b. The target reservoir capacity will then define how much sediment needs to be removed.

- c. You can include additional sediment additions from year to year.
- d. Consider the UCLA regional climate study for future temperatures and precipitation projections.
- 6. Pick an annual removal rate and then dig each year until you reach the target reservoir volume.
- 7. This is the kind of data that the Board of Supervisors can use to determine the risk versus environmental impact trade-off.

