MATT GAFFNEY: My name is Matt Gaffney. I'm 10 Project Coordinator for Inyo County's Yucca Mountain 11 Repository Assessment Office. These are preliminary 12 comments prepared by staff. The county is still in the 13 process of assessing all three documents. 14 The Inyo County Board of Supervisors will 15 16 submit written comments in December to the U.S. Department of Energy that will represent Inyo County's 17 18 final comments for the administrative record. Number 1, inadequate analysis in the draft 19 Repository Supplemental Enviroimpact Statement relating 20 21 to groundwater impacts to the Lower Carbonate Aquifer. 22 The draft Repository Supplemental EIS gives an adequate description of individual groundwater basins, recharge 23 sources, water uses, and major subterranean geologic 24 25 characteristics. 1 The SEIS also gives a brief summary of Inyo County's groundwater studies program, mentioning 2 that a primary focus of the county "has been the 3 investigation of the source of water that discharges 4 from the various springs on the east side of Death 5 Valley and whether there is a hydraulic connection 6 between those springs and the groundwater moving beneath 7 Yucca Mountain." 8 9 The county has amassed a body of strong 10 scientific evidence through geochemical analysis that 11 the Lower Carbonate Aquifer, which underlies the repository, has several discharge points on the western 12

- 13 side of the Funeral Mountains in the Furnace Creek area
- 14 of Death Valley National Park.
- 15 The county also recognizes, as does the draft
- 16 SEIS, that groundwater discharged in the park is mixed
- 17 with other groundwater sources from the Ash Meadows area
- 18 and the Amargosa Desert.
- 19 The draft SEIS makes mention of an independent
- 20 study, conducted by the University of Nevada Las Vegas,
- 21 that substantives this theory of carbonate flow
- 22 discharging into the park.
- 23 The brief section describing Inyo County's
- 24 program also concludes that flow from the volcanic
- 25 aquifers does not discharge into the park. While this
- 1 statement is correct, it misinterprets the purpose of
- 2 Inyo County's program, which is to study whether the
- 3 LCA, and not the volcanic aquifers, discharge into the
- 4 park.
- 5 The DOE assumes that because the volcanic
- 6 aquifers do not discharge into the park that no impacts
- 7 to the park are anticipated. This is an erroneous
- 8 statement, as Inyo County believes that the park will be
- 9 potentially affected by contaminated discharge from the
- 10 LCA and not the volcanic aquifers.
- It should also be noted that the DOE concedes
- 12 that Inyo County, but not the park, will be impacted
- 13 from contaminants in the volcanic aquifers.
- 14 Radionuclides in the volcanic aquifers will surface at
- 15 the Franklin Lake Playa and Alkali Flat, near Death
- 16 Valley Junction, California. However, the DOE predicts

- 17 that this will happen after any applicable compliance
- 18 period.
- 19 From Inyo County's perspective, the most
- 20 glaring omission in the draft SEIS is that it contains
- 21 no meaningful assessment of potential impacts to the
- 22 LCA. The draft SEIS makes no predictions, based on
- 23 water infiltration and waste package corrosion rates or
- 24 groundwater migration times, of the severity or time
- 25 frame for impacts to the LCA or its discharge points in
- 1 the park.
- Accordingly, the draft SEIS contain no impact
- 3 assessment for plant life, wildlife, wildlife habitat,
- 4 or drinking water supplies in the park that could
- 5 potentially be impacted by migrating radionuclides from
- 6 the repository.
- 7 The 2002 FEIS frequently reference ongoing
- 8 studies relating to groundwater impacts, but the draft
- 9 SEIS contains little new information on studies
- 10 conducted by the DOE, the State of Nevada, or Nye and
- 11 Inyo Counties.
- 12 The DOE concedes that Death Valley proper is
- 13 the regional hydrological sink for surface and
- 14 groundwater, yet Inyo County is scarcely mentioned in
- 15 terms of groundwater impacts from the repository.
- 16 The Yucca Mountain Regional Hydrographic Map
- 17 on page 3-3 in the "Affected Environment" section
- 18 conveniently omits California in terms of hydrographic
- 19 areas, even though maps on pages 3-28 and 3-30 clearly

- 20 show Inyo County and Death Valley as part of the Death
- 21 Valley regional groundwater flow system, receiving flow
- 22 from both the volcanic aquifers and the LCA.
- Number 2, inadequate analysis in the draft
- 24 Repository Supplemental Impact Statement relating to
- 25 groundwater pumping in the region, its effects on
- 1 repository compliance and groundwater migration from the
- 2 repository. Currently, an upper gradient exists in the
- 3 LCA which causes LCA water to move upward into the
- 4 volcanic aquifers because of a steep downgradient found
- 5 in the vicinity of Yucca Mountain.
- 6 The DOE argues that the upper gradient will
- 7 prevent migration of radionuclides from the repository
- 8 to the LCA. While Inyo County's scientific data
- 9 supports this conclusion, the upper gradient is
- 10 ephemeral and very fragile. The county believes that
- 11 the upper gradient could be degraded by regional
- 12 groundwater pumping, both from the LCA and volcanic
- 13 aguifers.
- 14 The DOE maintains that the future effects of
- 15 groundwater pumping are highly speculative and need to
- 16 not be considered in any NEPA analysis. Therefore,
- 17 there is no analysis from groundwater pumping in the
- 18 region and no regulatory measures to maintain the upper
- 19 gradient.
- 20 Inyo County strongly disagrees with this
- 21 assertion. At the very least, the county believes that
- 22 the DOE should consider present pumping rates and its
- 23 impact on the upper gradient and radionuclide migration.

24	Any NEPA analysis of repository performance	
25	and radionuclide migration that does not take into	
1	account the effects of groundwater pumping is incomplete	
2	and completely inadequate.	
3	Number 3, cleanup or remediation plan for	,
4	radionuclides surfacing at Alkali Flat/Franklin Lake	
5	Playa. The 2000 FEIS states that the water from beneath	
6	Yucca Mountain surfaces at Alkali Flat and Franklin Lake	
7	Playa, and the 69,000 people could be exposed to the	
8	contaminated groundwater.	
9	The county recognizes that NEPA does not	
10	require mitigation measures. However, the county	
11	strongly urges the DOE to implement a	
12	mitigation/remediation plan and an evacuation plan	
13	should the repository suffer a catastrophic failure.	
14	Number 4, the inadequate analysis relating to	۲
15	the socioeconomic impacts to Inyo County. The DOE	
16	considers Inyo County outside the influence for	
17	socioeconomic impacts analysis under NEPA.	
18	Inyo County strenuously disagrees with this	
19	assertion, as the repository is approximately 15 miles	
20	from the Inyo County line and the boundary for Death	
21	Valley National Park.	
22	The park has approximately 800,000 visitors a	
23	year, many of whom are foreign tourists. The county	
24	relies heavily on tourism revenues from the park, as	
25	well as other regional attractions, such as the China	
1	Date Ranch, the Amargosa River, bird watching, and local	

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mineral baths.
 2
              The county is concerned about reduced tourism
 3
     revenues, as well as decrease in real and business
 4
    properties from repository operations and the
 5
 6
     transportation of nuclear materials through the county.
 7
               Therefore, Inyo County should be considered
     within the region of influence for socioeconomic impacts
 8
     analysis because of its proximity to the site. Without
 9
    meaningful analysis in the 2002 Final EIS and now the
10
     draft SEIS, the DOE's impact assessment of socioeconomic
11
     impacts in Inyo County is incomplete and entirely
12
     inadequate.
13
              Number 5, inadequate analysis relating to
14
15
     reasonable alternatives to the Caliente Rail Corridor.
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    The Draft Rail Corridor/Alignment EIS states that if the
17
     Caliente Rail Corridor is not completed, that the future
18
     course is uncertain with regards to the transportation
19
    of nuclear materials to Yucca Mountain.
20
               Inyo County believes that if the Caliente Rail
21
    Corridor fails, truck transport will become the
    preferred method of transportation to the repository.
22
23
    Yet the Draft Rail Corridor/Alignment EIS contains no
24
     analysis for a mostly truck shipping scenario, which
25
    should be considered a reasonable alternative given the
    massive uncertainty surrounding the Caliente Rail
 1
    Corridor. This will be the largest rail construction
 2
    project in 80 years and will cost 2.5 to 3 billion
 3
    dollars to complete the rail line.
 4
 5
               The Caliente Rail Corridor also faces several
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- 6 engineering challenges, as the route traverses seven
- 7 north-south mountain ranges with steep grades and
- 8 numerous areas prone to flash flooding.
- 9 The Caliente Rail Route will also impact
- 10 grazing allotments by local ranchers and require
- 11 approximately 175 new groundwater wells to be drilled
- 12 along the route to support construction.
- 13 Given the uncertainty with cost, engineering
- 14 challenges, and land-use conflicts, the prospects of the
- 15 Caliente Rail Corridor being completed is highly
- 16 questionable. Therefore, the DOE should be required to
- 17 analyze a mostly truck shipping campaign as a reasonable
- 18 alternative to the Caliente Rail Corridor under NEPA.