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Via email only

15 May 2018

Ms. Danette Woo
Mojave National Preserve
Attention: Water Plan & EA-Comments
2701 Barstow Road
Barstow, California 92311
danette_woo@nps.gov

RE: Mojave National Preserve Management Plan for Developed Water Resources Environmental Assessment

Dear Ms. Woo,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the Mojave National Preserve (MNP) Management Plan for Developed Water Resources Environmental Assessment (draft EA), dated March 2018. Although the document is not technically referred to as a "draft" EA, we expect that the current document will be revaluated so the "final" EA addresses public comments including those given below. We also expect that the final Management Plan will be amended to include/address many of the recommendations given herein and by other Affected Interests.

Given the location of the proposed project in habitats occupied by Agassiz's desert tortoise (*Gopherus agassizii*) including designated tortoise critical habitat (U.S. Fish and Wildlife Service 1994), our comments pertain to avoiding injury to or mortality of tortoises, degradation/loss of habitats, and enhancing protection of this species during activities authorized by the National Park Service (NPS) identified in the draft EA.

Please note on page 8 of the draft EA that (*Gopherus agassizii mohavensis*) is only *Gopherus agassizii*; there is no subspecies referred to as "*mohavensis*." There is a small population of *G. agassizii* located in the Black Mountain area of Arizona east of the Colorado River, although this population does not warrant sub-specific status. Perhaps this situation has given rise to the confusion. There are three species of desert tortoises recognized in the southwestern United States and northwest Mexico - Agassiz's desert tortoise (*G. agassizii* = synonymous with "Mojave desert tortoise"), occurs north and west of the Colorado River in California, Nevada, northwest Arizona and southwest Utah; Morafka's desert tortoise (*G. morafkai* = synonymous with "Sonoran desert tortoise") (Murphy et al. 2011) occurs east of the Colorado River in western and southern Arizona and Sonora, Mexico; and Goode's thornscrub tortoise (*G. evgoodei*) occurs in Sonora and Sinaloa, Mexico (Edwards et al. 2016).

The Council agrees that "The expansion of water development beyond those specific objectives, or for the purposes of expanded hunting opportunities or nonnative species habitat, is not considered appropriate for this plan or compatible with the GMP [General Management Plan] and NPS policy" (draft EA at page 60). We appreciate that protecting tortoise populations is one of the "Objectives in Taking Action" identified on page 2 of the draft EA, particularly since half of the Preserve is designated as critical habitat for the federally threatened Mojave desert tortoise (draft EA at page 5).

As shown in Table S-2 for multiple alternatives, we are particularly concerned about "Uncertain wildlife population effects," particularly with regards to subsidizing common ravens and coyotes, which are both known predators of desert tortoises. As per page 49 of the draft EA, "About 26 guzzlers are in designated critical habitat for the desert tortoise." So, for the Council, placement of guzzlers inside or outside wilderness areas, which is a primary focus of the draft EA, is not as important as placement of guzzlers in tortoise habitats versus non-habitats and inside versus outside tortoise critical habitat. The same is true for the guzzlers that the NPS is proposing to neglect or abandon.

Known Impacts of Small Game Guzzlers on Desert Tortoises

On pages 107 and 108, the draft EA provides an adequate description of Hoover's (1995) findings, including his concern with heightened tortoise mortality in fiberglass-bottomed guzzlers. NPS cites two studies (Andrew et al. 2001 and Rosenstock et al. 2004) that found no tortoise remains in guzzlers or water developments in southeastern California and southwestern Arizona, respectively. NPS concluded that entrapment in guzzlers may not be a substantial source of mortality for tortoises. In examining the information in these two studies, NPS' conclusion is only one that may be derived from the data. Other equally valid conclusions include (1) tortoises did not occur near the guzzlers that were examined (i.e., guzzlers were found in non-habitat areas); (2) guzzlers are in a location that tortoises cannot easily access; and (3) the guzzlers had a different design that either allows tortoises to exit or denies access to them.

Andrew et al. (2001) examined 13 wildlife guzzlers in the Sonoran Desert of Riverside and Imperial counties for signs of drowned tortoises. They found no tortoise remains. The guzzlers that they studied were big game guzzlers that differ in design from small game guzzlers. Big game guzzlers typically have a trough with high sides that would prevent a tortoise from

accessing water or entering the guzzler tank. Andrew et al. (2001) concluded that "concern that guzzlers of that type present a direct threat to desert tortoises should be obviated" by this study. Therefore, this may be a reason and contributing factor why Andrew et al. (2001) did not find tortoise mortality in these big game guzzlers.

The Rosenstock et al. (2004) study used three video-monitored water catchments (guzzlers) in the valley bottoms in southwestern Arizona. This study was within the range of the Sonoran desert tortoise (*Gopherus morafkai*). The Sonoran desert tortoise is found in habitats that are different from the Mojave desert tortoise. Sonoran desert tortoises occur on rocky, steep slopes and lower mountain slopes (USFWS no date). The video-monitored water catchments in the Rosenstock et al. (2004) study were in valley bottoms in habitats not frequented by Sonoran desert tortoises. The Rosenstock et al. (2004) study does not provide any conclusions regarding catchments and Sonoran desert tortoises, but acknowledged mortalities for small animals occurring "at various types of wildlife waters."

Regarding water catchment design, the Rosenstock et al. (2004) study did not provide a description of the catchments. There were two photographs of catchments in the report. One had a concrete trough; the other appears to have a slope of soil leading into the water with the surface water surrounded by soil. These two designs appear to be different from the description of the small game guzzlers in the draft EA, with the trough design resembling the description of a big game guzzler in the draft EA. We conclude that the information provided in the draft EA does not fully disclose available information and that an examination of all the data does not support the NPS' conclusion that guzzlers may not be a substantial source of mortality for the tortoise.

Given this information, the tortoise cannot afford any mortality, especially if it can be avoided at guzzlers that will be abandoned/neglected by modifying them to avoid the threat of mortality (e.g., from drowning, entrapment, etc.), and at guzzlers that will remain in place by implementing regular maintenance and monitoring to confirm they no longer present a possible threat of tortoise mortality.

The Council has serious concerns about sources of human mortality for the tortoise given the status and trend of the species range wide and in the MNP. Between 2004 and 2014, 10 of 17 monitored populations of the Mojave desert tortoise declined from 26% to 64% and 11 are no longer viable. For the two populations that occur in the MNP, the Ivanpah population is viewed as nonviable and declined 56.05%; the Fenner population is viable (4.8 tortoises per km^2 with the viability threshold of 3.9 per km^2) but declined 52.86% (U.S. Fish and Wildlife Service 2015). If this rate of decline from 2004 to 2014 continues, the Fenner population may no longer be viable in about 2020.

While NPS states in the draft EA that it has "not found that drowning in water developments or guzzlers is a substantial source of mortality for desert tortoises" (draft EA p. 108), the Council believes that any anthropogenic loss of tortoises from sources of mortality in guzzlers is unnecessary and preventable. The status and trend data for the tortoise supports our assertion that any mortality from drowning or entrapment in guzzlers (whether neglected, abandoned, or maintained) is unacceptable.

It is curious that the draft EA does not include MNP's wildlife biologist, Dr. Hughson's findings of 28% tortoise mortality in the 32 guzzlers inspected in the MNP in 2004 (see Hughson to LaRue personal communication on 29 June 2011, in Attachment: Desert Tortoise Council letter to Lawrence Whalon, Mojave National Preserve 18 July 2011). The final EA should include this information. LaRue inspected half of the guzzlers documented in Hoover's (1995) study, finding several intact dead tortoises that had obviously drowned. We do not believe that the speculation given on pages 107 and 108 of the draft EA that tortoise "remains were washed or blown into the tanks" has any validity, and serves to dismiss or minimize the importance of guzzler impacts on tortoise mortality.

Page 91 of the draft EA states, "Between 2006 and 2013, volunteers repaired or rebuilt 60 guzzlers in non-wilderness locations. While about four wilderness guzzlers were repaired at some point, none of the wilderness guzzlers have been repaired in at least the past decade. *Small game guzzlers that were repaired or rebuilt between 2006 and 2013 are not expected to require additional major repairs within the 20-year life of this plan* [italics emphasis added]." We appreciate that many of the rebuilt guzzlers are in tortoise critical habitat as shown in the map on page 93. However, the nature of the repairs is not described. Given the results from the Hoover (1995) study and findings reported by Hughson in 2004 regarding tortoise remains in guzzlers in MNP, the Council is concerned that the NPS did not implement monitoring to determine the effectiveness of these actions regarding tortoise mortalities in guzzlers. If tortoises are still dying in the repaired and/or rebuilt guzzlers, we strongly believe that NPS still needs to repair or retrofit them to prevent further mortality, rather than not repair them at all over the next 20 years.

In addition, there is the question of compliance with the biological opinion (USFWS 2001) issued to the NPS for MNP's General Management Plan. The biological opinion required NPS, within two years, to inventory all guzzlers in desert tortoise habitat and assess whether they could entrap desert tortoises; within three years, retrofit all guzzlers identified as having the potential to kill desert tortoises; and, within five years, retrofit all other guzzlers within desert tortoise habitat. We believe the draft EA should include information regarding the NPS' compliance with these requirements including the number and location of guzzlers with the potential to kill tortoises and dates when they were retrofitted. It should also include documentation of what the incidental take of tortoises has been since issuance of the biological opinion regarding mortality from guzzlers and whether this take has exceeded the allowable take limit in the biological opinion.

The following statement is made on page 108: "Although entrapment in guzzlers may not be a substantial source of mortality for desert tortoises [a questionable conclusion given that dead tortoises were found in 28% of the guzzlers Hughson inspected in 2004], most guzzlers have a ramp that allows wildlife entering the water to escape (Bleich *et al*. 2005). It is now standard practice to install a durable roughened (for traction) ramp in small game guzzlers to prevent desert tortoise mortality." This implies that ramps prevent tortoise mortality but fails to divulge that it is actually the ramps that provide access to the slickened fiberglass bottoms, which effectively facilitates tortoise mortality. Also, ramps were in place during Hoover's (1995) studies and Hughson's 2004 studies, which is clear evidence that ramps do not prevent tortoise mortality; rather another interpretation of the data is they provide entry into guzzlers that entrap tortoises because of slickened surfaces beyond the ramps.

Ineffectual Remedial Actions Identified to Prevent Guzzler Tortoise Mortalities

Table 6 on page 9 of the draft EA indicates that entrances to guzzlers would be "blocked to prevent desert tortoise entrapment." We note that, whereas this may be possible for larger tortoises, between roughly 200 and 300 mm in length, hatchling tortoises are 40 to 50 mm in length and can easily slip between the rebar placed at the entrances of guzzlers (see photograph on page 91 of the draft EA). It is not likely that the openings to small game guzzlers can be effectively blocked to prevent these smaller tortoises from entering and drowning. In addition, the presence of a vertical wall at the top of the ramp would impede a tortoise from exiting the tank (Hoover 1995) if the animal were located on the tank-side of the wall. A tortoise would need to climb the ramp and the wall at the top of the ramp, which is unlikely.

In our experience, the surfaces of the tanks in small game guzzlers in the Lanfair Valley and elsewhere are either concrete or fiberglass, which is described on page 88 of the draft EA. Of 30-or-so guzzlers LaRue inspected in the early 1990s in the MNP, seven tortoises drowned in guzzlers with fiberglass bottoms; none were found dead in guzzlers with concrete bottoms. However, the draft EA does not indicate that the guzzlers with fiberglass bottoms would be retrofitted to avoid this known source of mortality. We strongly recommend that (1) all existing fiberglass-bottomed guzzler tanks that are not decommissioned be resurfaced with concrete or other material to prevent drowning; (2) no new guzzlers be constructed with fiberglass or other slick-bottom surfaces; (3) fiberglass-bottomed guzzlers that are not to remain be removed and not neglected or disabled; and (4) all guzzlers in tortoise habitats be monitored regularly for tortoise mortality.

Given the concern expressed above and the following sentence, the draft EA does not fully disclose or discuss the efficacy of the ramps: "Within desert tortoise habitat, escape ramps would continue to be repaired as needed on nonwilderness guzzlers, and would be inspected to ensure they are functional on wilderness guzzlers where tortoises may have become dependent." During the initial scoping meeting the Council attended in June 2011, Dr. Hughson of the NPS indicated that California Department of Fish and Game (CDFG) biologist, Frank Hoover, found tortoises dead in approximately 20% of the small game guzzlers inspected in the MNP during the 1990s. She further indicated that NPS staff and volunteers inspected 32 of these same guzzlers in 2004 when dead tortoises were found inside 28% of the guzzlers inspected. This documents that the ramps and blocking techniques that were implemented between the early 1990s and 2004 did not have the desired effect of eliminating tortoise mortality. We recommend, as given above, that fiberglass tank bottoms be resurfaced in addition to repairing ramps.

Future Monitoring

The following statement on page 145 should be supplemented with the italicized wording that follows: "All proposed alternatives, including No Action, include the installation of escape ramps in all retained small game guzzlers that occur in designated desert tortoise habitat to reduce this potential threat:" *All proposed alternatives shall include a monitoring plan to determine if recently rebuilt small game guzzlers with escape ramps are effectively preventing tortoise mortality, and if not, additional measures will be developed until guzzler mortality of tortoises no longer occurs.* We also point out that this is not a "potential threat;" it is a known threat.

The draft EA refers to several studies in the Sonoran Desert documenting entrapment of other animals excluding tortoises, but does not divulge results of any NPS monitoring studies in the MNP since 2013 to determine if these rebuilt guzzlers and retrofitted escape ramps are reducing tortoise mortality. Has NPS implemented any guzzler monitoring studies? NPS needs to develop and implement annual monitoring of rebuilt guzzlers, particularly in tortoise critical habitat areas, to see if tortoises are still dying in them. In the absence of subsequent monitoring, statements like this one on page 145 are unsubstantiated because they do not assess the efficacy of the ramps: "…it has become common practice to install escape ramps in small game guzzlers to minimize the potential for entrapment."

Each of the alternatives, excluding the No Action Alternative, has the following wording (see pages iv through vi in the draft EA): "Other elements, including groundwater resources, water rights, hazardous materials, and other water uses not included above would be monitored and managed proactively." All monitoring is restricted to groundwater levels, impacts to bighorn sheep, and Gambel's quail use while no monitoring is identified for desert tortoises. The Council firmly believes that persisting monitoring for tortoise mortality and subsidized tortoise predators must be added to the list of monitoring requirements for all alternatives. And, if tortoise mortality is facilitated by NPS water development facilities, new measures will be identified and implemented to address this mortality. Unlike the following statement on page 51 of the draft EA, "This monitoring protocol is not intended to directly influence any specific management actions," monitoring should directly determine new management actions.

Deficiencies in the Draft EA

In the action alternatives, NPS proposes to neglect, remove, or disable many of the small game guzzlers in MNP so they would not function as sources of subsidized water in the long-term. The terminology used in the draft EA is unclear regarding what actions NPS would implement to neglect, remove, and disable guzzlers, and what effects these actions would have on the tortoise, other wildlife species, and their habitats. For example, neglecting guzzlers may result in the partial collapse of their roofs, walls, or ramps that could kill, injure, or entrap tortoises and other wildlife species. Similar results could occur if the escape ramps or appropriate egress facilities are not maintained (similar to the situation reported for guzzler maintenance and tortoise mortalities between the 1990s and 2004). The neglected guzzlers may entrap tortoises and other wildlife species for years until the tanks no longer hold water.

Removing guzzlers would result in the immediate loss of subsidized water as well as disturbance of habitat in the area of the guzzler and routes of travel from roadways to the guzzlers. Disabling guzzlers may include restricting access of wildlife to water, preventing the collection and containment of water, or something else. In addition, if the tanks are steep-sided, then neglecting or disabling them may result in long-term mortality from entrapment. The effects of neglecting, removing, or disabling small game guzzlers will likely affect tortoises and other wildlife in different in unforeseen ways. We believe the draft EA fails to define the actions that would be implemented under "neglect," "remove," and "disable," and the final EA should include an analysis of these different effects to the tortoise and other wildlife species.

Tortoise populations in MNP are declining (USFWS 2015). Whereas the draft EA makes the following statement on page 107, "Annual desert tortoise monitoring in 2011 estimated that about 11,000 tortoises occur in the Ivanpah Valley and about 12,000 are in the Fenner Valley," it does not discuss or analyze the declines of tortoises in the region; nor do these numbers reveal trends in tortoise populations. For example, U.S. Fish and Wildlife Service (USFWS) population monitoring studies have shown a 56.05% decline of tortoise numbers in the Ivanpah Critical Habitat Unit and a 52.86% decline in tortoise numbers in the Fenner Critical Habitat Unit (USFWS 2015). The final EA needs to augment the discussion given on page 107 to show the full known extent of tortoise declines in the MNP. These declines validate our concern that any loss of tortoises in small game guzzlers must be prevented as soon as possible and that subsidizing tortoise predators with new or existing water sources must be avoided wherever possible.

A search for the word, "raven," reveals it is mentioned five times in the draft EA, excluding references. One of these is to indicate that ravens are common in the MNP; that raven populations are augmented by water sources; and three references to them as predators of juvenile tortoise. It is our understanding that NPS has two years of raven monitoring data in the MNP, yet there is no indication in the EA that NPS has any baseline data for raven occurrence. Also, there is no indication that NPS intends to monitor raven populations subsidized by existing or new water developments. Three years of data is the standard for raven monitoring before remedial action is taken. Given these observations, the Council believes the draft EA is deficient and the final EA needs to address potential raven predation issues, particularly with regards to monitoring and remedial actions if new and existing water developments are shown to subsidize raven populations.

Given the purpose of MNP in its enabling legislation, the purpose and need statements in the draft EA and its objectives, the substantial declines in the status and trend of the tortoise in MNP and range wide, the absence of monitoring data in the draft EA regarding tortoise mortality at guzzlers (especially for those modified with escape ramps between 2006 and 2013), and guzzler use by tortoise predators, the Council cannot support any of the alternatives proposed as they allow guzzlers to occur in tortoise habitats or linkage areas where they may cause and contribute to tortoise mortality.

We believe the NPS should include another alternative in the final EA that would remove guzzlers from tortoise habitats and linkage areas regardless of their wilderness status, and would monitor remaining guzzlers to determine their use by tortoise predators and if they are contributing to tortoise mortality. Given the dire status of the tortoise, the NPS should implement actions as soon as possible that would remove guzzlers from tortoise habitats and by doing so, their associated sources of tortoise mortality. Neglecting or disabling guzzlers to produce this same effect will take decades to achieve and the desert tortoise cannot survive the ongoing rate of mortality that long.

Council-Identified Issues in July 2011 Scoping Comments Not Addressed in the Draft EA

After attending the public scoping meeting on 29 June 2011, the Council provided formal scoping comments in a letter dated 18 July 2011, which is attached. In that letter we identified the following issues that are not addressed in the draft EA. In each case, we provide the verbatim wording from the 2011 letter in italics followed by clarifying comments (numbers in the original letter are retained). In our previous comments, "Plan" refers to MNP's 2011 version of the Water Resources Management Plan. The final EA must address these outstanding questions and concerns to remedy the deficiencies in the draft EA, and the current Plan amended as necessary.

1c. Given that dead tortoises were found at similar levels in the 1990s (20% of the small game guzzlers inspected) and in 2004 (28%), in spite of rebar placed in the openings to prevent animals entering the guzzlers and mesh placed inside the guzzlers to allow animals to escape, how will the Plan address this known mortality factor? Although the draft EA provides some information about impacts to tortoises (Hoover 1995), it seems to conclude that Hoover overestimated the extent of the impact by quoting studies by Andrew *et al*. 2001 and Rosenstock were performed in occupied tortoise habitats). There is a statement at the top of page 91 next to the photograph of a guzzler that ramps were installed and mesh added to address tortoise mortality, but in fact, ramps were in place during Hoover's studies in the early 1990s and mesh was in place during Hughson's studies in 2004, which means that ramps with and without mesh have not functioned to avoid tortoise mortality. The Council maintains that either NPS needs to resurface fiberglass tanks with a cement-like coating or another effective solution needs to be identified in the final EA.

1d. Can the guzzlers with fiberglass bottoms be coated with cement or other abrasive material that will allow tortoises and other wildlife to escape, as is apparently the case with cement-bottomed guzzlers? This question is not answered in the draft EA, and is reasserted above to address the inefficacy of ramps fitted with mesh to prevent tortoise mortality.

Neither of the following two questions given in our scoping comment letter is addressed in the draft EA.

1e. Is there any evidence of tortoise mortality in big game guzzlers? If so, how can this mortality factor be prevented?

1i. If NPS intends to keep the guzzlers (i.e., if the Plan does not require that they be removed), should NPS formally consult with USFWS who would issue a formal biological opinion authorizing some level of acceptable incidental mortality of tortoises? DTC [Council] *does not consider any loss of tortoises in guzzlers to be acceptable; guzzlers should either be closed or modified to prevent drowning.*

As we mentioned above, the draft EA is completely deficient in assessing potential impacts of ravens (and coyotes) and NPS' intended actions to monitor and avoid increased predator subsidies. So, the following questions from July 2011 are still outstanding and should be addressed in the final EA:

2a. The Plan should provide maps showing the locations of manmade water sources, particularly small game guzzlers, relative to locations of raven-depredated tortoises. It should show the locations of guzzlers relative to raven nests where depredated tortoises have been found, and analyze the likelihood that offending ravens are obtaining water at these sources.

2b. Given the recent observations of coyote predation of tortoises associated with the Fort Irwin translocation study, the Plan should report on known coyote predation of tortoises. It should further analyze the likelihood that guzzlers are subsidizing local coyote populations and how that subsidy may result in tortoise mortality.

In the July 2011 letter, we identified shooting as a potential impact to tortoises in the vicinity of small game guzzlers. Neither of the following two scoping comments is addressed in the draft EA:

3a. The Plan should document known shooting mortalities of tortoises in the MNP. It should report the locations of any known shooting mortalities relative to small game guzzlers. It should also compare the dates of heightened aboveground tortoise activity (April-May, September-October, or other dates if documentation exists) with hunting seasons for birds and other small game. Which hunting seasons (if any) coincide with heightened tortoise activity in the MNP? Finally, the Plan should analyze the potential threat to tortoises by hunters and others who shoot in the MNP as a result, in part, of the maintenance of small game guzzlers in tortoise-occupied habitats, including critical habitats.

3b. If not already, the Plan should provide for hunter education that emphasizes the importance of tortoise conservation, including but not limited to, keeping hunters' vehicles on designated open routes; checking under vehicles to ensure no tortoises are crushed; observing speed limits at all times on both paved and unpaved roads to avoid crushing tortoises; appropriately discarding litter and food materials that may be consumed by ravens, coyotes, and other tortoise predators; and any other measures that will minimize and preferably avoid harming tortoises by hunter activities.

Finally, although our 2011 comments asked NPS to consider the following specific monitoring recommendations, none of these suggestions appear in the draft EA. Did NPS consider them to not to be substantive or were they accidentally not addressed? The Council maintains that the draft EA fails to provide for essential monitoring and re-emphasizes that the following monitoring efforts are needed:

4a. Long-term monitoring of all manmade water sources, particularly small game guzzlers, with the stated purpose of either modifying or removing those guzzlers where tortoises are found dead inside the guzzler.

4b. A related monitoring effort may study the differential use (if any) of guzzlers by tortoises during years of above average, average, and below average (i.e., drought) rainfall. Scats and tracks may be two variables that could be measured at guzzlers to see if tortoises are using them more or less depending on rainfall levels.

4c. On-going monitoring of raven-depredated tortoises should focus on determining if manmade water sources are subsidizing offending ravens [and coyotes].

4d. Focused monitoring to see if shooting related tortoise mortality is occurring in the MNP, particularly in the vicinity of manmade water sources.

We appreciate this opportunity to provide input and trust that our comments will further protect tortoises during authorized project activities. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other NPS projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above.

Regards,

Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Literature Cited

Attachment: Letter to Lawrence Whalon, Mojave National Preserve from the Desert Tortoise Council on Scoping Comments on Mojave National Preserve's Water Resources Management Plan dated July 18, 2011.

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