

June 1, 2021

Katrina Symons
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Dear Ms. Symons:

Thank you for this opportunity to provide scoping comments on the Amargosa Wild and Scenic River (WSR) Comprehensive River Management Plan (CRMP). The Amargosa River is one of the crown jewels of the desert southwest, providing a globally important resource for biodiversity, hydrology, and recreation. It is also one of the most fragile ecosystems in North America, and must be managed with the highest possible level of conservation.

The Amargosa Conservancy is a 501(c)3 non-profit organization based in Shoshone, California and has been the leading voice for the conservation of the Amargosa River for 16 years. The Amargosa Conservancy is dedicated to standing up for the wilds, waters, and communities of the scenic Amargosa Basin and Eastern Mojave. The Conservancy engages in advocacy, education, science, on-the-ground conservation, and land preservation in order to promote the long-term health of the Amargosa Basin watershed.

Together we submit these comments and urge you to take bold action to save an ecosystem which is currently at a tipping point.

Background

The original 26.3 miles of Amargosa Wild and Scenic River ("WSR") were designated in the Omnibus Public Lands Management Act of 2009 (PL 111-11) on March 30, 2009. A second designation, adding 7.5 miles of river, was included in the John D. Dingell, Jr. Conservation, Management, and Recreation Act (PL 116-9) on March 12, 2019. In total, the Amargosa Wild and Scenic River covers 33.8 miles from Shoshone, California in the north, through Tecopa, California and the Amargosa Canyon, ending at the River's crossing of Highway 127 near Little Dumont Dunes.

Some of the outstandingly remarkable values (ORVs) which make the Amargosa River such a special place and were reasons for its designation as Wild and Scenic include: natural scenery, with rugged desert mountains towering over the vibrant green ribbon of the River; vital habitat for rare wildlife and plants, including the Amargosa vole and the Amargosa pupfish; unique and highly accessible geology; rich cultural history, including both indigenous and mining history; wildlife watching opportunities; hiking and other passive recreation opportunities; and off-road touring and other mechanized recreation opportunities.

The Wild and Scenic Rivers Act (16 U.S. Code §1274(d)(1)) (“WSRA”) requires the development of a comprehensive management plan “to provide for the protection of the river values.” The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this chapter.” The components of the Wild and Scenic River System (“WSRS”) “shall be administered in such [a] manner as to protect and enhance the values which caused it to be included in said system... In such administration primary emphasis shall be given to protecting its [a]esthetic, scenic, historic, archeologic, and scientific features,” (§1281(a)).

Beyond simply managing and administering rivers protected under the WSRA, there is an affirmative obligation on land managers entrusted with managing a WSR to take proactive measures to maintain the ORVs for which the river was designated. “The Secretary of the Interior ... shall take such action respecting management policies, regulations, contracts, plans, affecting such lands, ... as may be necessary to protect such rivers in accordance with the purposes of this chapter,” (§1283(a)).

The WSRA specifically requires that a management plan be developed and published in the Federal Register “within 3 full fiscal years after the date of designation,” (§1274(d)(1)). The original 26.3 miles of the Amargosa WSR was designated in 2009, and since no management plan had been prepared as of 2018, the lawsuit *Center for Biological Diversity v. U.S. Bureau of Land Management*, 2:18-cv-02448 was filed. As a part of a settlement of this lawsuit, BLM agreed to complete the Amargosa CRMP by December 31, 2024.

Relationship of CRMP to Existing Plans

The April 30, 2021 Scoping Letter refers to the CDCA, NEMO, and the DRECP Plans which include CDCA-wide conservation management actions (CMAs) as well as specific Management Directives for the ACECs identified in the DRECP. The CMAs and other management directives incorporate earlier ACEC plans and other activity plans and provide additional management direction. However, no activity plan is cited for the Amargosa South ACEC, as a result the basis and development of the Objectives and Management Actions provided in the Scoping Letter, with reference to the DRECP, is unclear. Further, the ‘Nationally Significant Values’ and ‘Relevance and Importance’ terms are derived directly from implementation of the ACEC authority at Title II of the Federal Land Policy and Management Act of 1976. The ‘Objectives’ and ‘Management Goals’ depicted in the Scoping Letter also appear to be derived from that

ACEC authority and associated guidance. The preparation of a CRMP based primarily on ACEC guidance would be fatally flawed because the WSR requirements for protecting ORVs are more specific and must be the basis for the plan .

The CRMP must be based on the WSR Act. The policy that ‘...preserve[s] ...rivers or sections thereof in their free-flowing condition to protect the water quality of the river..’ is paramount. And the criterion for developing Objectives and Management Actions and prescriptions must be the ‘...outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values...’ .

The BLM Eligibility Study was based on the Wild and Scenic River Act and was displayed in Appendix O of the 2002 NEMO CMP amendment to the CDCA Plan. We are not aware of a Suitability Study. The description of Outstanding Remarkable Values are quite good for the purpose of the Eligibility Study. However, the ORV descriptions must be updated to reflect the actual WSR segments designated. The discussion of the ORVs in the CRMP should be much more thorough and comprehensive. The discussion of ORVs should be formatted specific to each WSR segment [e.g., wild, scenic, or recreational] as required at 16 USC §1281.

We believe the free flowing condition and quality of water is paramount and necessary for the protection and, if feasible, enhancement of the ORVs. We therefore request that quantification estimates for each ORV in each segment of the river be the highest priority Management Action selected in the CRMP.

Water and protection of flows

The Amargosa River is unique among the Wild and Scenic River system in that it is entirely reliant on groundwater discharge for its flows. Essentially all of the ORVs for which the Amargosa Wild and Scenic River was designated depend on sustained groundwater flows for their survival. **As such, the conservation of groundwater resources needs to be the chief guiding priority for the CRMP.**

Per analyses by Zdon (2014; 2015; 2020), groundwater flows which come to the surface in the WSR come from one primary source, two secondary sources, a tertiary source, and from a variety of flowpaths. Snowmelt from Mount Charleston and the Spring Mountains provide much of the water for the WSR, along varied flow paths through Stewart Valley and Ash Meadows, and thence southward to Shoshone; through Chicago Valley and thence to Shoshone or to Resting Springs and Tecopa; or through Charleston View and California Valley to Willow Creek and the Canyon. Secondarily, water comes from the broader area to the north and east of the Death Valley Regional Flow System, via the so-called Superchannel and Ash Meadows; and also from the south via snowmelt from the Kingston Range to Willow Creek and the Canyon. Tertiarily, there is flow down the river from Beatty to the Amargosa Valley area where there is some mixing at Ash Meadows. The exact amount or nature of the mixing is not well understood among hydrologists.

In two places, these flowpaths are impacted by significant groundwater pumping in Nevada: the Amargosa Farms area of Amargosa Valley; and in the Pahrump Valley. Groundwater pumping in these valleys collectively exceeds 25,000 acre feet per year or more, possibly much more, as it's impossible to know exactly how much is being pumped from domestic wells in Pahrump. Historically pumping was far higher, and it's likely the pulse of drawdown is still permeating through the aquifer and potentially affecting the WSR. Analyses primarily by Zdon (2020) have shown that continued drawdown of these aquifers poses an existential threat to the flows which sustain the WSR.

Beyond simply monitoring or managing, it is imperative that BLM take proactive measures to protect the sustained flows of groundwater which create the Amargosa Wild and Scenic River. There are currently no protections in place to ensure overallocation of groundwater resources does not unduly impact the flows of the WSR. The California State Water Resources Control Board has no regulatory authority over ground water and the Amargosa Basin is a low-priority basin under California's Sustained Groundwater Management Act (SGMA). The Amargosa watershed is unadjudicated and Inyo County has no ground water management ordinances in the area.

As for the Nevada side, where almost the entirety of the pumping occurs, the Nevada State Engineer has regulatory authority for groundwater within Nevada, but does not have statutory requirements to manage for the protection of groundwater dependent ecosystems across the state line in California. And no interstate compact exists for the Amargosa River or Death Valley Regional Flow System. As a result, over pumping in Nevada is demonstrably affecting groundwater discharge at springs in the Amargosa Basin in California, and may already be affecting flows in the WSR.

We acknowledge information provided in the scoping document regarding the Public Water Reserve. However, there is much more information regarding ground water and reserved rights that will have to be considered in the CRMP. There are also other statutory federal reserved water rights including for the 1994 BLM Wilderness and NPS Death Valley Park. In addition, there are judicially established water rights [Winter's doctrine] for the FWS and perhaps NPS for the Death Valley National Monument, the Timbisha Shoshone Indian reservation and other reservations. We request identification of filings for all such federal water rights that could affect the WSR segments.

We expect management actions to include requirements that BLM quantify and file to protect all federal reserved water rights with the State of California and Nevada. Irrespective of fact or speculation as to any ultimate adjudication by the California Water Resources Control Board or the Nevada State Engineer as head of the Nevada Division of Water Resources, the BLM should file to protect these reserved water rights. Concerns that there may be inadequate water available for allocation do not provide a rationale for the BLM not filing and should not be considered in BLM's quantification of those reserved rights.

There are many non-governmental filed water rights in the Basin, mostly in Nevada. These too should be identified in the CRMP. In order to protect the ORVs for which the WSR was designated, the CRMP should:

- Specifically outline the baseline hydrologic conditions at the time of designation so that appropriate quantification of federal reserve water rights can occur.
- Outline the current hydrologic conditions at the time of the CRMP authorship, and determine what if any loss of flows in the WSR has occurred and is projected to occur.
- Provide a high-level inventory of current pumpage within the groundwater watershed (broadly defined as the Death Valley Regional Flow System).
- Provide a description of any contestation BLM has made of post-1994, 2009, or 2019 water filings in the basin upstream from BLM's federally reserved water rights.
- Provide a description of any denials or contests or request for denials by other agencies under the authority of the Wild and Scenic Rivers Act (e.g., section 12) BLM has made, and if so which, of requested authorizations.
- Provide an action item list for BLM to complete to secure a groundwater supply to ensure flows of the Amargosa WSR as of the date of designation are not impaired. These action items should include:
 - working to attain priority status for the Amargosa Basin in California under SGMA;
 - applying for federal reserve water rights in both California and Nevada and working to address conflicts with priority water rights;
 - protest new water rights or change applications with the Nevada state engineer for proposals which would impact the water supply of the WSR;
 - develop formal agreements, other than an Interstate Compact, with appropriate Nevada governmental entities;
 - exploring opportunities for purchasing and retiring water rights in Pahrump and Amargosa Valleys;
 - becoming a stakeholder in and submitting comments on development projects in Nevada which may have a downstream impact on the water supply of the WSR;
 - and more.

We appreciate the complexity and workload associated with water right filings with the two States. Our understanding is that quantification of federal assertions will be specific to each individual ORV. The CRMP must specify the methodology to be used to determine specific quantifications sufficient to protect and enhance the fish, wildlife, and vegetative ORVs. While the other ORVs are important and may also require quantification determinations, it may be that recreation [e.g., birding] and scenery are largely a function of the riparian portion of the vegetation ORV. The CRMP should also determine a quantification for sufficient flow to occasionally flush the river system.

Typically, CRMPs are formatted with a chapter on free flowing and water quality discussions followed by treatments of individual ORVs. We believe such formatting is appropriate. While vegetation is not specifically cited in the WSR Act as an outstanding remarkable value, it certainly is an '...other special value...' We believe the description of vegetation should be

exhaustive and comprehensive. Riparian areas are exceedingly rare in the desert. And the vegetation in the Amargosa drainage constitutes a significant desert resource. Therefore, a detailed map or maps should delineate listed species and designated critical habitat, special or sensitive species of the various federal and state agencies, the mosaic of the half dozen or so vegetative communities or series, and any water sources and associated vegetative types. Finally, in the vegetative ORV or separate section, the type and location of invasive species and past and anticipated management actions should be provided. If this information is partially available in a treatment plan and monitoring data or reports it could be included as an appendix or referenced as a publicly available document. However, the effect on water flows, if any, should be specified in the CRMP. Such vegetative geospatial information for the components of the vegetative ORV as described above should extend beyond the river corridor boundary to be provided in the September draft CRMP. Some specific comments of vegetative resources in relation to the WSR corridor are below.

WSR Corridor delineation

A fundamental variable in the plan is the distribution for the 10,816 acres [33.6 miles x 320 acres/mile] outside the high water marks of the river. Presumably, this will not be precisely 320 acres per each individual mile.

The Amargosa River is a unique wild and scenic river in that the outstandingly remarkable values for which it was designated do not lie within a linear river bed. Springs, both natural and artificial, feed the river, and they frequently are not directly at the bottom of the river bed, as with the Borehole. Additionally, there are many important resources, for instance Amargosa vole marshes or sensitive plant populations, which are off the course of the riverbed. As such, the WSR boundary needs to be flexible to ensure that the maximal number of features which contribute to the outstandingly remarkable values for which the river was designated are encompassed within the WSR boundary.

The WSR boundary should be designed to capture the maximal amount of features which contribute to the ORVs for which the WSR was designated. The WSR boundary should be designed to include (from north to south):

- All mesquite bosque vegetation features within Shoshone Wetlands north of highway 178.
- All plant populations of BLM sensitive species between Shoshone and Tecopa Hot Springs Road, which primarily occur west of the river bed and east of highway 127.
- All Amargosa vole (*Microtus californicus scirpensis*) marshes and their source waters to the maximal extent possible, including the Borehole and Marsh 1/54.
- All *Nitrophila mohavensis* (Amargosa niterwort) and *Chloropyron tecopense* (Tecopa birds beak) populations between Furnace Creek Wash Road to the north and Old Spanish Trail to the south.

- All areas containing riparian vegetation within Amargosa Canyon, including any side canyons containing mesquite (honey and screwbean), willows (*Salix* spp.), or other important vegetation.
- The “slot canyon.”
- The maximal amount of riparian corridor possible up Willow Creek from the confluence with the Amargosa River toward China Ranch.
- The WSR corridor can be more narrow than average south of the Dumont Dunes access road, because the river is ephemeral there and there are relatively fewer ORVs which need to be protected.

It is of central importance to protect Willow Creek up to China Ranch by including it in the WSR corridor. The private lands at China Ranch have been protected in perpetuity through a conservation easement from The Nature Conservancy. The reach of Willow Creek between the China Ranch boundary and the confluence with the Amargosa contains essential habitat for both listed bird species and both native fish species, important recreational values with the Amargosa River Trail, indigenous cultural history sites, mining-era historic values at the “1903 cabin” and along a spur of the T&T Railroad, and abundant unique geological features. Additionally, this reach provides flow to the Amargosa River below the Confluence, extending the length of perennial flow within the Canyon.

If the proposed configuration of the WSR boundary in the draft CRMP is considered by the public to be sub-optimal, we will request that the 30 day comment period be considerably lengthened to address concerns such as: redefining the WSR boundary, amending ORV lists and analysis within the WSR corridor, & re-specifying management actions. The likelihood of this situation arising could be reduced if the BLM Barstow convenes a citizen group. This group could provide transparency and be consultative rather than advisory. To keep the group size workable, the BLM could limit it to individuals or nominees of entities that commented during scoping.

Data & Data Needs

There is an abundance of data which should be considered during the development of the CRMP, including in the description and quantification of ORVs, the delineation of baselines for biological and abiotic resources, and the determination of rights necessary to protect those resources. The CRMP should consider data cited below in the CRMP analysis. However, the analysis should not be limited to just the studies cited below.

Of foremost consideration should be the numerous hydrologic studies which have characterized the flows and sources of Amargosa Wild and Scenic River waters. This includes Andy Zdon's State of the Basin 2014 and State of the Basin 2020, an article from Zdon et al. in *Environmental Forensics* from 2015, the recent Halford et al. characterization of the Death Valley Regional Flow System, Belcher's 2019 characterization of the hydrogeology of the hydrogeology of the Amargosa Wild and Scenic River, and numerous other studies from USGS and others examining the complex hydrology of this region.

Data quantifying the biological resources of the Amargosa should also be considered. These include studies of the results of a BioBlitz conducted by The Nature Conservancy, surveys for endemic fishes in the Amargosa Canyon by Mike Davis and others, botany of the area by Naomi Fraga (California Botanic Garden), avian fauna surveys from Chris McCreedy (Point Blue Conservation Science) and others, and the numerous publications related to the Amargosa vole by Janet Foley (UC Davis) and collaborators.

An evapotranspiration study has been conducted by USGS which has not yet been finalized and released. The data from this study are essential to properly quantifying the flows of the WSR. The CRMP should not be released until the USGS evapotranspiration report has been finalized and released.

The scoping documents did not provide a quality map showing the river corridor. Prior to the release of the draft CRMP, a map of 7.5' base scale, with topographic features, & delineating the high water boundaries of the river corridor should be made publicly available. The map should delineate surface and subsurface ownership status within and slightly beyond the default and proposed 320 acre corridor. Similarly, individual maps should be provided which geospatially display vegetative resources, wildlife and zoological resources, and historic and cultural resources water rights. The ideal map of water rights locations would be for the entire basin.

It is imperative that there be an ongoing monitoring program of the hydrologic and biological resources of the Amargosa Wild and Scenic River. The CRMP's menu of action items should include sustained funding for hydrologic monitoring of the extensive network of monitoring wells in the area, and continued support for the spring surveys that have occurred and currently have an important ongoing data set for understanding the river. Bio Blitz's have also proven successful in the area, as demonstrated by TNC's two local efforts. The CRMP should provide a mechanism for promoting and funding such efforts. BLM should also prioritize ongoing support for data collection and surveys of imperiled flora and fauna such as the Amargosa vole, the Amargosa Canyon fish populations, and the abundant resident and migratory avifauna.

Wildlife & Plants

The Amargosa WSR is home to numerous imperiled species of animals and plants. These species are among the outstandingly remarkable values for which the WSR was designated. The conservation of these species, which are all dependent on sustained flows of groundwater feeding the WSR, should also be a guiding priority for the CRMP.

The CRMP should ensure adequate protections for *Microtus californicus scirpensis* (Amargosa vole) and its habitat, which includes:

- The maximum amount practicable of vole habitat is included in the WSR corridor, including the Borehole and Marsh 1.
- The areas containing or adjacent to vole habitat should be managed for conservation. Recreational impacts to the vole's habitat must be addressed, including those at the Borehole.

- The flows which sustain the WSR in the Tecopa area are sourced from within the town of Tecopa. These flows must be secured through conservation easements, acquisition, or other conservation measures. The CRMP should outline a process and priorities for doing so.

The CRMP should ensure adequate protections for rare plants, including *Nitrophila mohavensis* (Amargosa niterwort) and *Chloropyron tecopense* (Tecopa birds beak).

- Populations of *Chloropyron tecopense* adjacent to Highway 127 should be fenced to protect against off-highway vehicle incursions.
- Populations of *Nitrophila mohavensis* in Tecopa should be monitored for abundance, disturbance to the population and it should be fenced.
- Populations of *Nitrophila mohavensis* along Furnace Creek Wash Road are in decline due to altered hydrology. A study should be undertaken for whether and how to restore hydrological flow to sustain the wetland there.
- *Zeltnera namophila* (spring loving centaury) a federally threatened species, was historically known to occur in Tecopa Hot Springs. Recent surveys have not relocated it, but if populations are documented within the WSR boundary the CRMP should ensure that immediate protections are put in place.
- Water flows which sustain these species should be identified and protected.

The CRMP should ensure adequate protections for the two rare species of fish found in the WSR, *Rhinichthys osculus nevadensis* (Amargosa Canyon speckled dace) and *Cyprinodon nevadensis amargosae* (Amargosa pupfish). This should include Willow Creek up to the boundary with China Ranch.

- The CRMP should ensure ongoing monitoring of both species within the Amargosa Canyon. Having a continuous dataset is essential for understanding population trends and factors affecting the habitat of these species.
- The CRMP should prioritize rangewide surveys for *Cyprinodon nevadensis amargosae*, which also lives in the Tecopa area in addition to the Canyon.
- The CRMP should prioritize funding for invasive species management in the Amargosa Canyon (Wild section of the WSR), including for:
 - Invasive mosquitofish and other aquatic species, which pose a threat to the native fishes of the WSR.
 - Invasive vegetation, in particular tamarisk, which reduces habitat quality and population size of native fishes.
- Water flows which sustain these species should be identified and protected.

The CRMP should ensure protections for habitat for imperiled species of birds, including *Vireo bellii pusillus* (least Bell's vireo), *Coccyzus americanus* (yellow-billed cuckoo) and *Empidonax traillii extimus* (southwest willow flycatcher).

- The CRMP should prioritize ongoing monitoring and management of invasive species including brown-headed cowbird.
- The CRMP must outline a balance between invasive species removal and nesting habitat preservation. Invasive species removal must always be accompanied by

restoration of native plants through outplanting in order to ensure sufficient canopy cover exists to permit nesting.

- The CRMP should prioritize rapid restoration in the event of disturbances to the riparian habitat such as wildfire in order to limit invasive plants and reduce erosion.
- Groundwater flows which sustain the riparian habitat that these species depend on should be identified and protected.

CRMP should require and fund consistent monitoring of imperiled species within the WSR.

The CRMP should ensure that restoration activities such as invasive species removal, native species outplanting, streambed manipulation or other techniques are permitted and are not precluded by management prescriptions.

The CRMP should promote/fund research into the imperiled species, in particular population dynamics, critical habitat mapping, habitat-relationships, etc.

Recreation

The Amargosa River is an important resource for recreation, both as a destination in itself and as a stopover for those en route to Death Valley, Ash Meadows, or BLM lands within the Basin. Hiking, bathing, birdwatching, photography, off-highway vehicle use, and bicycling are all recreational values on the Amargosa Wild and Scenic River. However, the Amargosa WSR is currently suffering impacts from unmanaged recreation. In many cases, users utilizing the land or the river in an unmanaged fashion are causing significant impacts to the ORVs for which the WSR was designated. Some of these impacts may be irreversible.

The Amargosa River Trail is a recreational resource of regional significance, following the only free-flowing perennial river in the Mojave Desert. One trailhead at China Ranch has now been fully developed in a partnership between the Amargosa Conservancy, China Ranch, BLM, TNC, and the State of California. The trail follows Willow Creek to the confluence with the Amargosa River, and then goes up the Canyon to Tecopa. Access is limited or forbidden at the Tecopa trailhead, which is on private property, near where the Amargosa River crosses the Old Spanish Trail Highway in the historic settlement of Tecopa.

- The CRMP should develop a plan for obtaining easement access across this private parcel so the public can legally complete the end-to-end hike.
- The CRMP should develop a plan for regular maintenance of the trail.
- BLM has invested time and effort in signage, in partnership with the Amargosa Conservancy, on the trail from China Ranch to the Slot Canyon. This signage should be extended along the River Trail to Tecopa.

Off-highway vehicle (OHV) use in the WSR area is regulated by the travel management plan component of NEMO (the Northern and Eastern Mojave Desert Plan), which designated open and closed routes across the California side of the Amargosa Basin. While some existing open

routes are problematic, a much more significant problem is the widespread illegal off-route use that is occurring and damaging resources, particularly in the Tecopa area. Therefore, there are two primary categories of activities that the CRMP must identify to address OHV recreation in the WSR corridor:

- BLM must revise their travel management plan to address issues where open routes are causing conflicts with or damage to the WSR's ORVs.
 - The CRMP must immediately require a survey of all existing roads in and around the WSR. The inventory of roads or routes should be updated. Any newly identified routes not on the BLM's RMP need to be designated as closed. Additionally, routes which are no longer considered necessary or are in conflict with the protection of the ORVs for which the WSR was designated need to also be designated as closed.
 - There are several routes which bring recreational users in close contact with sensitive habitat along what will likely be the WSR corridor, especially in the Tecopa area. These routes need to be closed.
 - We are particularly concerned about resource damage on the WSR associated with motorized vehicle use along Sperry Wash. The lower Amargosa Canyon is a site of significant impacts to the ORVs for which the WSR was designated. Users drive directly up the river bed. Engine oil and other vehicle fluid spills, trampled habitat, possible direct mortality to native fishes, all significantly impact the River. BLM has devoted resources to this route even prior to WSR designation. Any past regulatory or informational signing, barriers, restoration efforts, and BLM staff presence need to be specified. Monitoring needs to be required and data regarding the effectiveness of those efforts should also be documented and provided in the CRMP. BLM needs to re-route access to the Sperry Wash Route out of the Amargosa Canyon altogether, and then the Canyon needs to be closed from the Dumont Dunes road all the way up to the Sperry Wash route.
- Second, it is important that BLM vastly increase their efforts to regulate vehicle use and enforce laws, past plan decisions, and all CRMP decisions to ensure resource protection.
 - Road closures should be clearly delineated by signs and barriers, enforced, and riders educated to use designated open routes.
 - Rather than generic management actions, the CRMP should specify geographically specific signing, barrier installation, and restoration management sites as techniques and education efforts to control illegal off-route OHV use.
 - There is widespread off-route use in the mud hills near the Borehole, causing potential direct impacts to Amargosa vole habitat. Fencing and enforcement need to be stepped up to ensure there is not permanent degradation of resources nor impacts to endangered species habitat.
 - There is significant off-route use associated with the power line road between the river channel and Highway 127 north of Tecopa Hot Springs Road. This road should be fenced and have limited access.
 - There are significant impacts to the WSR associated with the Dumont Dunes OHV Open Area. There are tens of thousands of OHV users in this area on peak

weekends, and their use inevitably impacts the River. The CRMP needs to develop and implement a comprehensive plan to ensure that Dumont Dunes users do not unduly impact the ORVs for which the WSR was designated. A high priority Management Action needs to be the preparation and implementation of such a plan or the review, revision and implementation of any such existing plan.

One of the most significant recreational uses of the Amargosa WSR is for hot spring soaking at The Borehole. User impacts at the Borehole have increased dramatically in recent years, as the site has become publicized on social media and in guidebooks. The Borehole is within federally designated critical habitat for the Amargosa vole and is an acutely sensitive area. The CRMP must address recreation at the Borehole, and in particular must rein in the overuse which threatens the ecological integrity of the area.

- The CRMP needs to include a survey and estimate of current recreational use of the Amargosa River WSR, including at Borehole.
- The CRMP needs to include a plan for managing recreational use of the Borehole, including extensive use of fencing, barriers, user capacity limits and possible timed entry permits, and other mechanisms to ensure recreation does not unduly impact resources.
- The CRMP should also provide for better and more permanent OHV barriers along Tecopa Hot Springs Road, to ensure vehicular damage to the mud hills does not permanently destroy ORVs.

BLM must adequately address how visitor use will impact the ORVs for this WSR. It must describe an actual level of visitor use that will not adversely impact the ORVs. It must also describe an actual level of visitor use that will not adversely impact the Amargosa's ORVs. The Draft CRMP needs to clearly document the methodology used to determine the user capacity. The NEPA analysis needs to evaluate the impacts from the proposed user capacity(ies). Existing user capacity needs to be determined and used as a basis for evaluating impacts for the different designations (Wild, Scenic, Recreational). Consideration of access and how that affects ORVs and sensitive resources also needs to be included. For example, if vehicular parking is required for access, where/how will that affect not only the WSR, but if that parking is outside the boundaries of the WSR corridor, how will it affect existing resources, public safety, air/water quality etc. Monitoring of the user capacity is requisite, and the CRMP will need to provide clear triggers that immediately decrease user capacity if ORVs are being negatively affected.

Other Outstandingly Remarkable Values

We would expect some discussion of the archaeological resource, although we would understand if a map of sites is not publicly available. There are many historic features [e.g., TTRR] which should be described and Management Actions developed.

The Scenic ORV is quite spectacular. However the vegetative component of scenery is most dependent on water, whereas we consider the geologic component to be less so. As such, most Management Actions would be to protect scenic values by protecting the vegetative resource. Any water qualifications for this ORV should be supplemental to that for the vegetation ORV.

This Geologic ORV contributes to the scenic and scientific aspects of the WSR. There should be some description and associated Management Actions, such as reducing surface disturbing actions on more sensitive or paleontological resources.

Alternatives

We are concerned with the alternatives proposed in the CRMP scoping document.

It is not clear whether a plan and analysis for the 'No Action' alternative will be provided. Since a Court would probably consider a 'No Action' alternative to be inadequate as a plan, we would recommend that any analysis and plan, if produced, be in a NEPA supplement to the draft plan or otherwise distinguished from the proposed CRMP plan

One alternative needs to address the issue of the substantial alteration of hydrology in Tecopa Marsh resulting from the construction of the Tonopah and Tidewater Railroad (T&T). It is possible that the roadbed and associated berm could be breached in certain areas to create hydrologic connection with the marshes on the west side of the T&T, thereby increasing vole and marsh habitat. The CRMP needs to analyze the possibility for this conservation action, as well as the environmental consequences of doing so.

The scoping document seemed to imply that the preferred alternative would primarily consist of management prescriptions from the Amargosa South ACEC management plan in the DRECP. This is not sufficient. The Amargosa Wild and Scenic River has a specific set of management needs and resource concerns which need specific tailored policy prescriptions to address. Simply defaulting to some previous document will not fulfill the mandate of protecting the ORVs for which the WSR was designated.

A previous draft of a CRMP for the Amargosa WSR which was located in the Amargosa Conservancy office details significant and concrete management actions which should be pursued to protect the ORVs in the river, which should be included in this CRMP including:

- "Assert a federal reserved water right in a quantity sufficient to accomplish the purposes of the Wild and Scenic Rivers Act. The determination of what constitutes a sufficient quantity shall be based on the best information available at the time of the determination, including information obtained after completion and implementation of this [CRMP].
- Identify proposed land use changes on both public and private land that have the potential to reduce instream flows in the Amargosa River. Work with landowners, developers, local governments, and other parties to minimize or eliminate the impact of

proposed projects or activities on instream flows and/or groundwater levels in the Amargosa ACEC and WSR corridor.

- Evaluate all additional legal, political, and regulatory options for protecting instream flows and groundwater levels, and pursue those options that are likely to result in the greatest level of protection for river flows.”

A complete list of the recommended management actions can be found in the 2011 Draft CRMP attached to this comment letter. We are also aware there is a more recent draft of the CRMP that has been prepared by BLM, as recently as 3 years ago, which contains similar or the same management prescriptions. We consider these recommendations to be a baseline from which BLM can build, but management prescriptions along the lines outlined in quotations above are clearly what is required to protect the ORVs in the WSR, and the CRMP must contain similar recommendations to fulfill its objectives.

Issues related to Indigenous Communities

The Amargosa River is home to one extant indigenous community, the Timbisha Shoshone, who have reservation lands within the Amargosa Basin at Furnace Creek in Death Valley and at Death Valley Junction. The Amargosa Wild and Scenic River area was also formerly inhabited by Southern Paiute tribal members, before many of their settlements were taken over by white colonizers. Some of their descendents still live in the Amargosa Basin today, including among the non-federally recognized Pahrump Paiute.

Additionally, the area holds significance to a wider community of indigenous people. The Western Shoshone have long maintained the Poo-Ah-Bah retreat in Tecopa, which includes a hot spring that indigenous people have been bathing in since time immemorial.

The CRMP needs to ensure adequate consultation with local indigenous communities and tribal nations. Consultation is more than just sending a letter in the mail. The indigenous inhabitants of the Amargosa Basin and those who have a cultural tie to the area must have a central role and voice in the development of this management plan. Culturally appropriate and properly contextualized consultation is a focus of the Interior Department right now, and the CRMP could be an opportunity to try new approaches at engagement.

Issues Related to Private Property

There are some portions of the potential WSR corridor which intersect private property, most notably in Shoshone Wetlands and in Modine Meadows in the Canyon. These areas are of high conservation value, and the degree to which they are healthy ecosystems directly affects the ORVs of the WSR on public land. For instance, tamarisk infestation on these private lands will inevitably contribute to ongoing invasion or reinvasion post-treatment on public lands. The CRMP needs to address the opportunity for cooperative agreements to protect the ORVs.

Conclusion

Thank you for your consideration of our comments on the Amargosa Wild and Scenic River Comprehensive River Management Plan. The community of the California desert has been advocating for the conservation of this special desert gem for decades, and the CRMP is the instrument through which the River will finally achieve long-term protection. We have high hopes that it will outline a plan to thoroughly protect, restore, and enhance the outstandingly remarkable values for which the Amargosa Wild and Scenic River was designated.

Sincerely,

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References. attached to this letter:

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