Data Submitted (UTC 11): 7/17/2020 6:00:00 AM First name: ERLING Last name: JUEL Organization: Greenfields Irrigation District Title: Comments: Statement of issues and/or parts of the plan revision to which the objection applies:

Greenfields Irrigation District objects to Land Management Plan's failure to adequately acknowledge and account for the social and economic needs of the downstream, affected communities as well as the connection between proper and sufficient forest canopy and ground cover management and the watershed on which these communities rely. An inadequate forest fuels management plan and fire suppression strategy increases the chances for devastating forest fires which in turn increases the potential for water quality degradation, deceases water quantity and detrimentally impacts the characteristics of seasonal run-off.

Concise statement explaining the objection and suggesting how the proposed plan should be improved: ISSUE #1

Objection - The Land Management Plan fails to adequately acknowledge and address the social and economic concerns of the affected communities relying on the Sun River watershed downstream of the National Forest.

Solution - Emphasize in the entire Plan that Forest land management practices have an impact to land,

water and communities outside the National Forest Service boundaries while providing for plan provisions that address these concerns.

ISSUE #2

Objection - Because of the Management Plan's failure to adequately account for downstream water users, as referenced above, the Plan fails to provide sufficient, proactive management practices thereby ensuring a healthy and sufficient forest canopy and ground cover. The impact of such practices and the relationship between forests and watersheds are detailed and discussed by Lee MacDonald and John Stednick in the classic 2003 research paper: Forest and Water.

Solution - Amend the plan to incorporate an aggressive and proactive fuel load reduction strategy to

prevent widespread, intense, out-of-control forest fires that permanently alter the forest ecosystem. Unplanned fires need to be aggressively suppressed and controlled to avoid dangerous, widespread, devastating fires that grow "out-of-control". Proactive fuel load reduction will also help reduce the likelihood of out-of-control burns.

Statement demonstrating the link between objection and prior formal comments:

Both issues and objections have been repeatedly made since 2016 in formal letters to the NFS.

Objection Reviewing Officer:

The Greenfields Irrigation District (GID) has been engaged in the Plan Review process for the last 4 years. We have attended review sessions, provided our concerns and comments, and reached out to our Federal representatives. Our biggest concern has always been,

and remains, that the Management Plan fails to adequately acknowledge and address the unique social and economic impacts that forest management practices has on downstream, affected communities. Specifically, GID is concerned that current and future, forest management practices will have a detrimental impact on our senior water rights on the Sun River.

In the Sun River Watershed, irrigated agriculture is critical to the regional economy and the quantity and quality of water comprising the watershed is the single most important factor affecting our region. Locally, over 120,000 acres of irrigated ground rely on the Sun River to produce crops. Most of this water originates in the forest and alpine areas located in the National Forest. GID's primary reservoir is located within NFS boundaries.

It is well known that the two most significant components of the forest ecosystem which impact water quality, water quantity, and the seasonal, run-off hydrograph are the forest canopy and related ground cover. Devastating forest fires destroy the canopy and cover thus detrimentally impacting the run-off characteristics of the watershed. Without sufficient ground cover and canopy, erosion is unchecked producing elevated turbidity, reducing water quality, and reducing valuable storage in GID's reservoirs. The canopy is important as it helps reduce losses from wind-induced sublimation as well as lowering snow-pack temperatures which attenuates the timing of run-off.

The apparent problem, at least in the Sun River watershed, is that forest fires were aggressively fought for the first 80+ years which created an unnatural and unhealthy balance of available fuel. Then approximately 25 to 30 years ago, the philosophy of fighting fires experienced a complete reversal resulting in a more intense and widespread fires. This should have been anticipated as the fuel load had been artificially built-up and ready for burning.

GID understands that forest fires are natural and can be rejuvenating to the forest ecosystem. But the massive, out-of-control, intense forest fires can permanently alter the forest landscape. There must be a balance, a healthy middle ground. I believe this can be achieved by aggressively managing the forest canopy and ground cover to avoid the widespread, intense, and destructive forest fires. Such aggressive management practices should consist of mechanical thinning, selective harvesting,

and strategic, prescribed burns.

"Let-it-burn" is not a proactive fire management strategy and will not produce any desirable effects. However, fire suppression with an aggressive fuel reduction program is a proactive fire management strategy. In GID's opinion, more emphasis should be placed on fire suppression strategies until the fuel reduction objectives have been

adequately achieved. Also, more emphasis and incentive needs to be placed on extinguishing fires before they become catastrophic and unmanageable. This is especially important because fire suppression efforts are typically withdrawn for safety concerns when fires become catastrophic and out-of-control.

Simply put, the existence of a healthy forest canopy and floor cover are critical to a healthy watershed. The canopy provides protection and shelter against ablation through sublimation. The tree canopy also delays and prolongs spring run-off. The floor cover is truly the only guard against detrimental erosion and the subsequent sedimentation into our storage reservoirs.

Because there is such reliance on the Sun River watershed, the forest canopy and ground cover need to be proactively and aggressively managed. The proposed H-L&C National Forest Land Management Plan does not provide such assurances because it fails to account for the unique social and economic needs of the downstream affected communities; especially those with established senior water rights.

GID sincerely hopes that the NFS will amend the proposed plan so it seriously considers the value of fuel reduction efforts over that of allowing devastating fires. Limited, fires, whether natural or prescribed, can be healthy. Out-of-control, widespread, intense burns are not healthy. Downstream affected communities and senior water right holders need to be considered.