

# **Feasibility Analysis**

## **Iowa Hill/Gerle Meadow Land-for-Land Exchange**

### **Eldorado National Forest and Sacramento Municipal Utility District (SMUD) Region 5**

#### ***I. Exchange Proposal***

The Sacramento Municipal Utility District ("proponent" or "SMUD") is proposing an exchange of approximately 320 acres of their land for approximately 417 acres of Federal land.

The Federal lands consist of two contiguous geographic parcels which are located primarily south and east of the Slab Creek Reservoir, near the dam and SMUD's hydroelectric facilities. They range in elevation from approximately 2000' to 3000', with very steep slopes, which flatten out somewhat near their highest points. Brush, low-elevation mixed conifers, and oak hardwoods cover most of the property. These parcels are bounded on at least two sides by SMUD lands and other private lands. Both are situated in El Dorado County, State of California, within the Eldorado National Forest. (See attached maps.) The Federal land is known collectively as the "Iowa Hill" property.

The non-Federal parcel is situated in the high-country (5800' - 6000' elevation) of the Eldorado National Forest, approximately 3 miles northwest of Loon Lake, along a portion of the well-known Rubicon OHV Trail (see attached maps). The property is primarily flat, contains a significant portion of Gerle Creek--a perennial stream, and is covered with a mixture of Red/White Fir and Lodgepole Pine timber. It is also located within El Dorado County, State of California. The property is known as the "Gerle Meadow" parcel, and is bounded on three sides by NFS lands.

#### ***II. Strategic Plan and Forest Plan Compliance***

**Forest Service Strategic Plan** – This exchange complies with the Forest Service Strategic Plan, specifically:

- Goal 1: *Restore, sustain, and enhance the nation's forests and grasslands*
- Goal 2: *Provide and sustain benefits to the American people*
- Goal 3: *Conserve open space*
- Goal 4: *Sustain and enhance outdoor recreation opportunities*

**Eldorado National Forest Land and Resource Management Plan** – Forest-wide Standards and Guidelines p. 4-104:

- General Direction - *Seek optimum landownership patterns through land adjustments to reduce conflicts in the use and to improve administration of National Forest System lands.*
- Standards/Guidelines – Improve the ownership pattern and simplify land management by:
  - *Acquiring private land for public access to water and to protect watershed values;*
  - *Acquiring private land to consolidate ownership and reduce conflicts;*



- *Acquiring private land to protect scenic values, threatened and endangered wildlife species, and forestall non-compatible land uses;*
- *Disposing of National Forest parcels to create firm, logical boundaries.*

The Federal land proposed for exchange is located in Management Areas 21-24 (General Forest area managed for visual foreground/middleground retention and partial retention and for high-site timber.) Conveying this property to SMUD is generally consistent with the Forest Plan.

The non-Federal property proposed for acquisition is bounded by NFS lands similarly designated as Management Areas 21-24. The portions of the Rubicon OHV Trail (a nationally known 4-wheel drive route) located on adjacent NFS lands are within Management Area 4, and are managed by the Eldorado NF as a Special Area. Acquisition of the parcel is consistent with the goals and objectives of the Forest Plan.

**Eldorado National Forest Landownership Adjustment Plan (1994)** -- This exchange also complies with this plan. In general, the adjustment priorities are determined by the management benefits that would result from the acquisition/disposal. Although not specifically identified in the plan, the non-Federal parcel is a very high-priority acquisition for the Forest given its location along the Rubicon OHV Trail and the fact that it contains a highly significant prehistoric site that is considered to be of regional, national, and tribal importance. A portion of the Federal lands are identified in the plan for disposal. They are located along the western edge of the Forest, and are bordered by other private lands—some of which are owned by SMUD, and others which have been subdivided for residential development.

### ***III. Intended Future Uses***

**Federal Lands:** SMUD proposes to construct their planned Iowa Hill Pumped Storage Project, as part of their Upper American River Project (FERC License #2101). This would involve constructing a small reservoir at the top of a ridge approx. ½ mile northeast of Iowa Hill, along with a system of tunnels which would allow water to be pumped out of Slab Creek Reservoir and up to the new upper (Iowa Hill) reservoir, then released when needed to flow back down the tunnels through an underground powerhouse to generate energy. A new 230-kV transmission line would also be constructed along the north side of the planned Iowa Hill reservoir, connecting the underground powerhouse to an existing transmission line located approximately one mile to the east. Some new road construction along with improvement of existing roads is also proposed. Following acquisition of the Federal lands, SMUD may plan further development of the property in keeping with its mission in water operations. Such development would be subject to FERC, State and/or local review and approval as appropriate.

**Non-Federal Lands:** Upon acquisition, the non-Federal parcel and its resources would be managed in conformance with the Eldorado NF Land and Resource Management Plan designation of the adjacent lands (see discussion in section II. above) and with any other applicable plans/agreements. The Forest may also conduct meadow restoration activities on the parcel.

### ***IV. Site Inspection and Hazardous Materials; Title Evidence (non-Federal lands)***

**Federal Lands:** An initial site inspection has been conducted. The Federal parcels are primarily vacant lands, except for several native-surface and paved roads, a microwave reflector (owned by



SMUD), two powerlines (one owned by PG&E, and the other by SMUD), and a waterline owned by El Dorado Irrigation District (EID). A gaging station, culverts, cables, gates, and other miscellaneous improvements and discarded items related to SMUD's water operations also encumber the parcels. A bridge constructed from a railcar and an engineered footbridge may also be located on the Federal lands. At least six abandoned/wrecked vehicles were also noted in/near Iowa Creek in the westernmost end of the property. The parcels' ridgetops also show evidence of past logging. There is no indication of hazardous materials contamination associated with these improvements however a Phase I Environmental Site Assessment (ESA) will be conducted. The proponent would be the potentially responsible party relative to any discovery of contamination associated with SMUD's improvements. Indemnification language will likely be required in the patent.

**Non-Federal Lands:** An initial site inspection was conducted, and showed that the property is encumbered by the Rubicon OHV Trail, several other native-surface roads, a bridge, gate, and several structures including a cabin, shed, and outhouse. The parcel also showed evidence of past logging. The inspection revealed no indication of a release of hazardous substances on the parcel, however a Phase I ESA will be conducted. Indemnification language may be required in the Grant Deed.

An initial review of the available Preliminary Title Report, dated December 30, 2009 (see attached), along with the field inspection, did not reveal any title conditions or claims on title associated with the non-Federal lands that would prevent acquisition by the United States, or that could not be resolved by working with the exchange proponent. El Dorado County holds an easement for a portion of the Rubicon OHV Trail traversing the parcel, and claims the remainder as a County Road. When it conveyed out of the parcel, PG&E reserved: easements and rights of way for reconstruction, maintenance, etc. of PG&E's existing facilities; easements and rights of way for construction, maintenance, etc. of ditches, flumes, and aqueducts; and the right to use any existing roads. There is no evidence of PG&E facilities or ditches, etc. on the parcel. Per SMUD, PG&E may be willing to quitclaim these rights to SMUD prior to United States acquisition of the parcel. There appear to be no third party rights of record associated with the structures (cabin, shed, outhouse) or other improvements/roads on the property.

## **V. Resources and Uses**

### **Federal Land**

*Threatened, Endangered, and Sensitive (TES) Species:* There are no known TES plant species on the Federal lands. The lands may contain habitat for California spotted owl, northern goshawk, and several sensitive species of bats. The lands may also contain potentially suitable habitat for Pacific fisher.

*Heritage Resources:* There is one known historic site (mining-related) on the Federal lands, however, the Federal lands have incomplete survey coverage. Per Forest info, this site may contain the remains of a 1960s cabin, along with debris associated with dredging/slucing, and other artifacts dating back to the 1860s. (Note—SMUD is required to complete a Heritage Properties Management Plan, for Forest Service approval, within 6 months following FERC license issuance, which is expected in 2013). Lands adjacent to the Federal parcels were also used historically for the Pino Grande railroad logging, Cable Point, and construction of the old Chute Camp Road.



*Native American Issues:* SMUD has contacted the Native American Heritage Council and local tribes as part of its FERC relicensing effort. There are no known issues specifically associated with the Federal parcels.

*Caves:* There are no known caves located on the Federal lands.

*Grazing Permits:* There are no grazing allotments/permits on the Federal lands.

*Minerals:* A preliminary minerals review conducted by Dave Annis of the R-5 Regional Mineral Examiners Team, indicated that there appears to be a low potential for leasable and salable mineral resources, and a moderate/high potential for the occurrence of locatable mineral resources (specifically gold). Note that there are two active placer claims located on the southerly (Section 25) portion of the Federal lands. (See Section XI. of this analysis and the Federal Land Status Report for more information.)

*Special Use Permits, Agreements, and FERC License:*

*FERC License:* Approximately 50 acres of the westernmost portion of the property is located within the current boundary for FERC Project #2101. Once the new FERC license is issued (expected in 2013), SMUD will be required to submit new map exhibits for FERC approval, and license boundaries may change.

*Special Use Permits:*

--SMUD has a Forest Service special use authorization for a passive microwave reflector in the NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 30. (ref: PVL1006)

--EID (El Dorado Irrigation District) has a Forest Service special use authorization for a water transmission line (the Swansboro 8" pipeline) within a 20-foot right-of-way through the NE $\frac{1}{4}$ SW $\frac{1}{4}$  of Sec. 25. (ref: PVL1082)

--PG&E's power line (ref: GTN401901 and PVL4036), running from the dam southeasterly through the Section 25 parcel, is authorized under Forest Service special use permit issued by the Eldorado National Forest.

--California Division of Forestry (now Cal-Fire) was authorized in 1965 to construct a mechanized firebreak (Iowa Hill Firebreak & Truck Trail 250–350 ft. wide and 5 miles long). This use is no longer exercised. The permittee or Forest Service may terminate this permit with 90 days' notice.

*Agreements:* The Eldorado NF has been working with SMUD, FERC, and local agencies for a number of years relative to relicensing SMUD's Upper American River Project (UARP) -- FERC Project #2101-- and the proposed construction of the Iowa Hill Pumped Storage Project. Some agreements (see below) and a joint Final EIS for relicensing of the Project have been generated as part of this process.

For more information, see [http://hydrorelicensing.smud.org/implementation/imp\\_sett.htm](http://hydrorelicensing.smud.org/implementation/imp_sett.htm)

9/13/2005 – SMUD and El Dorado County entered into an agreement that outlines the provisions and payment to El Dorado County should SMUD initiate construction of the Iowa Hill Pumped-Storage Project.

1/29/2007 – SMUD and parties enter into the Settlement Agreement that outlines the provisions for the relicensing of the UARP, including the construction of the Iowa Hill Pumped-Storage



Project. Article 1-38 of the Settlement Agreement requires SMUD to obtain a special use authorization from the Forest Service for occupancy of National Forest System lands, if needed, to protect National Forest resources.

3/14/2008 – Final Environmental Impact Statement issued by FERC and USFS as cooperating agencies for the relicensing of the UARP, including the construction of the Iowa Hill Pumped-Storage Project. [http://hydrorelicensing.smud.org/implementation/imp\\_pfd/FEIS.pdf](http://hydrorelicensing.smud.org/implementation/imp_pfd/FEIS.pdf)

Once the new FERC License is issued, other development (besides the pumped storage project) is expected to include boating access upgrades at Slab Creek Reservoir, increased whitewater releases, and construction of a new powerhouse.

*Disposition of structural improvements, roads, and trails:* Portions of Forest System Roads 11N82, 11N08, 11N84, 11N84B, and 11N96 traverse the Federal parcels. The Forest Service will need to reserve easements over several of these roads to preserve access to adjacent NFS lands. Structural improvements on the parcel belong to SMUD, so they will remain. There are no system trails on the Federal lands.

### **Non-Federal Land**

*Threatened, Endangered, and Sensitive (TES) Species:* There are no known TES plant species on the non-Federal lands. The lands may contain habitat for Sierra Nevada yellow-legged frog and northern goshawk, and Gerle Creek is a self-sustaining brown trout fishery.

*Heritage Resources:* The non-Federal parcel contains a highly significant prehistoric petroglyph site that is considered to be of regional, national, and tribal importance. It also contains several other prehistoric sites. There are no known historic sites. (The cabin, shed, and outhouse on the parcel were constructed in the 1980's or 1990's, so would not be considered historic.) Additional cultural resource surveys may be conducted to determine the need for protection of the prehistoric sites.

*Native American Issues:* Besides strong support for protection of the petroglyph and other prehistoric sites addressed above, there are no known Native American issues associated with the parcel.

*Caves:* There are no known caves located on the non-Federal land.

*Grazing Permits:* There are no grazing permits affecting the non-Federal parcel.

*Minerals:* A review of claims filed in the area showed that the nearest active claims are approximately 3 miles away, and the remaining claims are all closed and at least two miles from the parcel. A preliminary review of the geology of the area indicated that it is not favorable for the occurrence of valuable minerals. In sum, it appears unlikely that minerals would contribute to the parcel's value.

*Special Use Permits, Agreements, and FERC License:* There are no permits affecting the non-Federal parcel. When SMUD acquired the parcel, their purchase agreement allowed the seller continued access to the property for recreational purposes, but only for as long as it's owned by SMUD. El Dorado County manages and maintains the portion of the Rubicon OHV Trail contained within the parcel. The parcel is located within the area encompassed by the Upper American River Project (FERC Project #2101), but is not specifically located within the FERC boundary.



*Disposition of structural improvements, roads, and trails:* The Forest will request that the cabin, shed and outhouse on the parcel be removed. The gate and bridges, however, could remain. SMUD does not anticipate reserving any easements over any of the roads. The County will continue to manage and maintain that portion of the Rubicon OHV Trail (Wentworth Springs Road) located within the parcel. There are no other system trails on the property.

## ***VI. Wetlands and Floodplains***

The **Federal lands** are comprised primarily of steep, dry slopes, with the only flatter portions located along the ridges and hilltops. The southerly parcel spans the lower portion of Iowa Canyon and contains approximately 1/3 mile of Iowa Creek. There are numerous drainages throughout the remainder of the property, however they support only seasonal streams. There are no meadows or other wetlands on the parcels. The **non-Federal parcel** is primarily flat, and contains at least 1.5 miles of Gerle Creek, a perennial stream. A few small meadows/wetlands are also located on the parcel. Given the above, it appears that there will be a large net gain of wetlands/floodplains acreage to the Federal estate, and thus will likely comply with E.O. 11998.

## ***VII. Boundary Management Review***

**Federal land:** Per a preliminary boundary management review conducted for the Federal property, one portion of the northerly Federal parcel (shown as "Parcel #2" on Exhibit A -- attached) may require some survey work to describe the parcel.

The preliminary review also indicated that the Federal parcels contain a total of approximately 417 acres, which is almost 13 acres less than that calculated by the proponent. This total may change once the Land Description Verification is completed, but any differences are expected to be minor.

**Non-Federal land:** This parcel appears to have been the subject of two surveys, so no additional surveying should be necessary. The assessor's acreage assigned to the parcel is 319.61 acres.

**Federal and non-Federal lands:** There will be a net reduction of approximately 2.4 miles of line and approximately 15 corners to be maintained. Marking and posting of approximately 3.75 miles of new boundaries may be needed following the exchange.

## ***VIII. Federal Land Status***

The Federal parcels proposed for exchange have Reserved Public Domain status, dating back to the early 1900s when the Forest was created by Presidential Proclamation.

Forest System Roads 11N82, 11N08, 11N84, 11N84B, and 11N96 traverse the parcels, along with a few existing non-system roads. It is anticipated that reservations will be needed for some of these roads to provide the Forest continued access to remaining NFS lands.

BLM's Master Title Plat (MTP) shows the only withdrawal affecting the Federal parcels is for FERC Project #2155, and includes only those lands located within the FERC boundary -- which would affect "Parcel #2" and the westerly portion of "Parcel #5" as shown in Exhibit A (attached). This FERC license is for the Chile Bar Project, located downstream from Slab Creek Reservoir, and operated by Pacific Gas and Electric Company. FERC approval will be required to convey the affected property to



SMUD. (NOTE: The MTP may be in error as it does not show a withdrawal for SMUD's FERC Project #2101. If a correction is made and FERC #2101 is added, or if it replaces #2155, FERC approval will still be required to convey the affected property to SMUD.)

Two active placer mining claims are located within the southern parcel (labeled "Parcel #5" on Exhibit A, attached), and affect almost the entire parcel. To avoid dropping part or all of these lands from the exchange, the Forest will need to facilitate a cooperative agreement between the claimants and the exchange proponent to allow for continued mining or mining related activities. This likely means that a reservation in the patent would be needed to address the terms of the agreement. (Should the claimants voluntarily relinquish the claims, then no such reservation would be needed.)

See the attached Federal Land Status Report (draft) for additional information.

#### ***IX. Water Rights Analysis***

A review of the State Water Resources Control Board database showed that no appropriative water rights are located on or affect the Federal or non-Federal parcels involved in this exchange. None of SMUD's water rights relative to its FERC Project #2101 affect the Federal lands.

PG&E (Pacific Gas and Electric Company) reserved the riparian rights on the non-Federal parcel when it sold the land in 1974. Per SMUD, PG&E may be willing to quitclaim these rights to SMUD.

#### ***X. Valuation Feasibility Analysis***

Per the attached Valuation Feasibility Analysis prepared May 10, 2013 by Ro McAuliffe (Senior Review Appraiser), the Federal lands could warrant a higher value than the non-Federal land, however the active placer claims could reduce that value. Both the Forest and Proponent are willing to add or reduce acreage, however, or utilize cash equalization (within the 25% of Federal value restriction) to equalize values. The analysis concludes: "Based on the information provided, it appears that this exchange is structured with enough flexibility on both sides to accommodate a balanced land exchange."

#### ***XI. Potential Issues and Support***

Communications associated with the active mining (placer) claims located on the Federal property will need to be handled in close coordination with the Regional Mineral Examiner's Team. Presuming the exchange moves forward, the Zone will request that BLM segregate the Federal parcels from mineral entry. This action will effectively also stop further mining activity (subject to valid existing rights) by the claimants, and they will need to be notified of such. The Forest will need to facilitate negotiations between SMUD and the claimants.

While El Dorado County has entered into an agreement with SMUD for the Iowa Hill Pumped Storage Project, and FERC/USFS have issued a decision through their EIS, there is continued concern and opposition from local/nearby landowners regarding this development, and its potential associated construction traffic, noise, and fire danger. The Forest anticipates the same people are likely to use the proposed land exchange to leverage their environmental and social concerns regarding the pumped-storage project. (Note – although El Dorado County supports the Iowa Hill development, the El Dorado County Board of Supervisors has formed the Iowa Hill Joint Action Committee to address the landowners' concerns.)



## ***XII. Identification of Party Responsible for Costs***

The proponent has agreed to pay all costs associated with completion of this exchange. SMUD currently has a collection agreement in place which will provide funding for Forest and Zone personnel to complete the initial stages of the exchange (Feasibility Analysis, Agreement to Initiate, and some initial NEPA analysis/reports). This collection agreement will be updated as needed to include additional funding to accomplish the tasks needed to complete the exchange – i.e. appraisals, land surveys, NEPA analysis and associated reports, title preparation/review, case processing, etc. SMUD will pay all hard costs and contracts directly.

## ***XIII. Public Benefit***

This proposed exchange appears to meet the intent of 36 CFR 254.3(b). Acquisition of the non-Federal parcel would consolidate landownership patterns along Gerle Creek, forestall potential development of the parcel, protect valuable watershed lands and riparian habitats, improve habitat connectivity and management efficiency, and provide protection for the nationally significant prehistoric (petroglyph) site located on the parcel. It will also facilitate the coordinated management needed for the Rubicon OHV Trail, and enhance public recreation opportunities in the area.

Transfer of the Federal parcels into SMUD's ownership would facilitate the planned development of their Iowa Hill Pumped Storage Project, which would support SMUD's goal to increase the renewable energy portion of their total energy production, and provide an additional 400MW of energy capacity during peak demand periods. Completion of the exchange would also consolidate SMUD's landownership near their power generation facilities, improving management efficiencies for both SMUD and the Eldorado NF, and eliminate the future need for the Forest to administer highly-encumbered lands.

Completion of this proposed land exchange is a high priority for the Eldorado NF, and it would serve the public interest well. I recommend that case processing continue.



KATHRYN D. HARDY  
Forest Supervisor  
Eldorado National Forest

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