

**SDG&E 8/27/10 Supplemental Response**  
**A.09-08-003 East County Substation (ECO) PTC**  
**Energy Division Data Request 11**  
**SDGE-ED-011: Q3**

**Data Request 11 Biological Resources Question 3**

3. SDG&E provided GIS data and impact numbers for some special-status plants in response to data request No. 10, however, not all of the plants observed have population estimates; therefore, an accurate assessment of existing numbers and impacted numbers for the project is not possible without further clarification. This information remains a data request.

**SDG&E 8/27/10 Supplemental Response to Question 3:**

**Proponents Environmental Assessment (PEA) Project Alternative**

On August 20, 2010, SDG&E provided the requested information for the ECO Substation Preferred Project alternative. The following information addresses the ECO Substation PEA Project alternative.

Approximately 660 individual sticky gerneas (*Geraea viscida*) and approximately 8,600 individual desert beauties (*Linanthus bellus*) were observed within the survey corridor during the 2010 rare plant surveys. Multiple geographic positioning system (GPS) points were taken of either individual specimens or clusters/populations of individuals. In order to determine the approximate numbers of individual plants associated with GPS points representing clusters or populations, SDG&E extrapolated the plant counts that were conducted within one-meter by one-meter plots in proximity to the GPS points representing the cluster or population. Based on this extrapolation, approximately 28 individual sticky gerneas and 215 individual desert beauties respectively will be impacted by construction of the Proposed Project. Table 1: PEA Proposed Project Substation Rare Plant Impacts that follows summarizes the estimated total number of sensitive plant species observed during the 2010 rare plant surveys and the total estimated number of plants that will be impacted during the construction of the Proposed Project as presented in the PEA.

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**Table 1: PEA Proposed Project Substation Rare Plant Impacts**

Species Name	Listing Status <sup>1</sup>	Approximate Total Number of Individuals Observed	Approximate Number of Individuals to be Impacted
Jacumba milk-vetch ( <i>Astragalus douglasii</i> var. <i>perstrictus</i> )	1B.2	189	19
Sticky geraea ( <i>Geraea viscida</i> )	2.3	660	28
Scarlet gilia ( <i>Ipomopsis tenuifolia</i> )	2.3	7	5
Desert beauty ( <i>Linanthus bellus</i> )	2.3	8,600	215

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<sup>1</sup> Explanation of state listing codes

**California Native Plant Society lists:**

1B.2: Rare, threatened, or endangered in California or elsewhere; fairly threatened in California  
2.3: Rare, threatened, or endangered in California only; not very threatened in California

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**Water Resources Source – response due August 27, 2010**

4. From SDG&E's response to data request no. 10 it is understood that final water quality/hydrology/drainage studies have not been prepared for all project components at this time. However, please provide initial hydrologic and hydraulic information for all project components that includes the following information:
- site map defining drainage patterns, existing storm drain systems, proposed drainage crossings, soil types, existing land types, and existing and proposed slopes
  - identification of pollutants of concern
  - identification of conditions of concern
  - identification of site design BMP recommendations
  - preliminary hydromodification analysis and discussion
  - identification of source control BMPs

**SDG&E Response:**

Initial hydrologic and hydraulic information for the ECO and Boulevard Substation are described below. The information provided for the Boulevard Substation Rebuild includes refined design elements based on the Initial hydrologic and hydraulic information. Water quality /hydrology/ drainage studies or designs have not been completed for the 138 kV transmission line or the 500 kV SWPL loop-in components of the project. Initial grading designs for the 138 kV line and 500 kV SWPL loop-in structures, construction yards, and maintenance roads have been developed to provide preliminary grading quantities and structure siting and feasibility information only. Engineering studies and project refinements are on-going as part of the development process; this submittal presents the best available information at this time.

**Bullet #1: Site Map**

Attached are the draft grading plans (*sheets ECO-S-903 through ECO-S-903.9*) and existing conditions hydrology map (*East County –Existing Hydrology, sht. 1 of 1*) for the SDG&E Preferred Alternative ECO Substation location. The existing conditions hydrology map shows defined or semi-defined drainage patterns for the site and nearby terrain. There are no existing storm drain systems at the ECO Substation site. Proposed drainage crossings are shown on the draft grading plans that show the proposed culverts along the access road and substation.

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Also attached is an updated preliminary site plan for the Boulevard Substation rebuild (*Preliminary Site Plan – Boulevard Substation, sht. 1 of 1*). The plan typically illustrates existing and proposed drainage patterns, existing drainage conveyance systems, proposed drainage systems, and existing and proposed slopes for the Boulevard Substation.

Per the County of San Diego’s Hydrology Manual Hydrologic Soil Group Map (USDA/NRCS SSURGO Soils 2007) the soil types within the ECO Substation area are Type A and within the Boulevard Substation area the soil types are Type A/B.

For the ECO Substation, the existing land use would be classified as “undisturbed natural terrain” according to the County’s Hydrology Manual. Existing land use within the Boulevard Substation area would be classified as “low density residential”.

**Bullet #2: Identification of Pollutants of Concern**

The pollutants of concern for both the Boulevard and ECO substations and access roads would include sediment, heavy metals from equipment and structure, organic compounds from cleaning solutions, oil, diesel, and gasoline for vehicles and trash from workers. Also, from San Diego County’s Standard Urban Stormwater Mitigation Plan (SUSMP), there is a list of potential and anticipated pollutants of concern for various types of projects. For this Project, the table below appears to apply to these types of development.

<i>Component</i>	Land Use Type	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash and Debris	Oxygen demanding Substances	Oil and Grease	Pesticides
Substation	Light Industrial /Commercial	P(1)	P(1)	X	X(2)	X	P(3)	X	P(3)
Access Road	Roadway	X	P(1)	X	X(2)	X	P(3)	X	P(1)

X = anticipated

P = potential

(1) A potential pollutant if landscaping exists on-site.

(2) Including petroleum hydrocarbons.

(3) Including solvents.

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**Bullet #3: Identification of Conditions of Concern**

For the ECO Substation, there are no conditions of concern. Drainage features along the east, north and south sides of the substation pads will divert water around the substation then back to the pre-construction drainage basins west of the substation. The natural drainage patterns will be unchanged. Stormwater runoff does not discharge into a Clean Water Act (CWA) Section 303(d) list of Water Quality Limited Segments requiring TMDLs.

For the Boulevard Substation, there are also no conditions of concern. Based on more refined engineering information, there is a proposed off-site runoff diversion wall just south of the proposed substation pad. This wall will divert runoff to a proposed concrete lined channel along the western side of the substation pad. Stormwater runoff does not discharge into a Clean Water Act (CWA) Section 303(d) list of Water Quality Limited Segments requiring TMDLs.

**Bullet #4: Identification of Site Design BMP Recommendations**

1. Preserve critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions.
2. Restrict heavy construction equipment access to planned green/open space areas.
3. Re-use of native soils.
4. Rural swales or curb-cuts to native landscaping along access road to drain runoff to pervious areas.
5. Permeable (or porous) pavement to drain runoff to pervious areas.
6. Minimize erosion from slopes by any or all of the following:
  - Disturb existing slopes only when necessary.
  - Minimize cut and fill areas to reduce slope lengths.
  - Incorporate retaining walls to reduce steepness of slopes or to shorten slopes.
  - Provide benches or terraces on high cut and fill slopes to reduce concentration of flows.
  - Rounding and shaping slopes to reduce concentrated flow.
  - Collect concentrated flows in stabilized drains and channels.

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**Bullet #5: Preliminary Hydromodification Analysis and Discussion**

For the ECO Substation, hydromodification analysis will be required since the Project's disturbed area is greater than 50 acres. The County of San Diego is developing a sizing tool (computer software) to help engineers determine the hydromodification impacts of a proposed project site. It is recommended that the hydromodification calculations be performed after this sizing tool is released for public use.

Based upon current regulations and the Interim Hydromodification Criteria, Hydromodification would not be required for the Boulevard Substation because the disturbed Project area is less than 50 acres. However, by January 2010, hydromodification will be required for all Priority Projects. Therefore, the site design for the Boulevard Substation will address hydromodification requirements and plan for the required facilities.

**Bullet #6: Identification of Source Control BMPs**

1. For on-site storm drain inlets, mark all inlets with the words "No Dumping! Flows to Sensitive Habitat" or similar.
2. For landscaping, show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. Show self-retaining landscape, if any. State that final landscape plans will preserve existing native trees, shrubs and ground cover will cover maximum extent possible; design landscaping to minimize irrigation, runoff, and use of pesticides and fertilizers that contribute to stormwater pollution. Select plants that are appropriate for site soils, slopes, climate, wind, sun, rain, land use, ecological consistency, and plant interactions.
3. For outdoor storage of equipment or materials, show storage areas and how they will be covered and what structural features or grading will be incorporated to prevent pollutants from discharging from the site.
4. For vehicle/equipment repair, maintenance, and cleaning, the engineer should designate areas for these activities and how the areas will be contained to prevent pollutant runoff.
5. For leaking or failure of large power transformers, have 100 percent containment at each power transformer.