CEQA drives the need for botanical review and reporting

It is the policy of the state to: “Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities...” (CEQA PRC, §21001(c)).

CDFW is trustee agency for fish and wildlife resources (CEQA Guidelines §15386 (a)). Section §15380(d) mandates that CEQA documents analyze potentially significant impacts and propose necessary and feasible mitigation for sensitive species formally listed under the ESA, CESA, as well as sensitive species that are otherwise considered rare, threatened or endangered (§15380(a) and (b)).

It is also state policy that: “Information developed in individual environmental impact reports be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations” (CEQA PRC, §21003(d)). The California Natural Diversity Database (CNDDB) is one such database and is primarily accessed through RareFind and BIOS (see protocols for more details).

Why use a protocol to conduct a survey?
Protocols ensure data collection and analysis are consistent, reliable, repeatable, defensible, and appropriate to address intended objectives (USFWS 2013)

Following the CDFW recommended protocols and guidelines allows efficient and timely project review:
• Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2009)
(both accessible at http://www.dfg.ca.gov/biogodata/cnddb/plants_and_animals.asp)

Who is a “qualified botanist”?
• Education; degree program, workshops, conferences, etc.
• Experience; apprenticeship, volunteer, on the job, etc.
• Certifications; wetland delineation, field and/or consulting botanist (new through CNPS), certified ecologist, etc.
• Current CDFW issued voucher collection permit (for State-listed species) in your name
• Positive rare plant detections and well documented survey effort

Thorough survey preparation
• Begin with a nine-quad search using positive detection databases available from CNPS and CNDDB to generate a list of potentially occurring rare plant species
• Identify vegetation and habitat types potentially present, and elevation range of project
• Use databases (CNPS and CNDDB) to broaden search to include species not detected within nine-quad area by querying habitats present within the project area
• Include California Rare Plant Rank (CRPR) 3 and 4 species on final scoping list in addition to rank 1 and 2 species; CalFlora and Consortium of CA Herbaria provide limited mapped locations for rare species. CNDDB maps CRPR 1 and 2 species and provides CRPR 3 and 4 species by quad
• Justify species omitted from final list, e.g. species restricted to a habitat type not present in or near the project area

Components of a good rare plant survey report
• Include a thorough project and site description with a detailed project map
• Describe methods and resources used to prepare for, and conduct the survey
• List potentially occurring rare plants with life history information and an assessment of potential habitat for each species
• Map survey routes including, dates, times and surveyors for each survey day
• Discuss site specific factors that may have led to false absences
• List all plant species encountered in the project area
• Include CNDDB field forms (or equivalent) and GPS mapped plant locations
• Describe plant protection measures for any rare species encountered

Integrating monitoring and research
Pursuant to CEQA §10818.6 et seq. and Guidelines §15097 et seq., a lead agency adopts a monitoring or reporting program to ensure project compliance and to mitigate or avoid significant effects on the environment. CEQA requires that mitigation measures be fully enforceable:
• Pre-consult with CDFW regarding the monitoring study design
• Design research and monitoring projects such that the results inform subsequent mitigation efforts and contribute to the understanding of the species’ habitat requirements
• Consider partnering with the scientific community (e.g. through local universities and CNPS chapters) to conduct plant management research and publish results
• Submit monitoring results to CNDDB as follow-up forms so occurrence data can be updated and incorporated into the database