Per California Code of Regulations, title 2, section 548.5, the following information will be posted to CalHR's Career Executive Assignment Action Proposals website for 30 calendar days when departments propose new CEA concepts or major revisions to existing CEA concepts. Presence of the department-submitted CEA Action Proposal information on CalHR's website does not indicate CalHR support for the proposal.

### A. GENERAL INFORMATION

<table>
<thead>
<tr>
<th>1. Date</th>
<th>2. Department</th>
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<tbody>
<tr>
<td>3/25/2022</td>
<td>Department of Conservation</td>
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<tr>
<th>3. Organizational Placement (Division/Branch/Office Name)</th>
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<tbody>
<tr>
<td>California Geological Survey</td>
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<tr>
<th>4. CEA Position Title</th>
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<tr>
<td>Branch Manager - Hazard Monitoring and Preparedness</td>
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<th>5. Summary of proposed position description and how it relates to the program's mission or purpose. (2-3 sentences)</th>
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<tr>
<td>This CEA proposal will further the mission of the CGS and the Department by placing more focus on the Department's strategies through the advancement of technologies and partnerships that support the natural and working lands initiatives through the protection of the environment and the health and safety of the citizens of California. The CEA will oversee multiple programs within the CGS that align with the Department's mission to identify and foster projects that promote intelligent, sustainable, and efficient use of California's surface and subsurface natural resources. This includes responsibility to support and develop data, information sharing, and strategy development that focuses on hazard identification, mitigation, and recovery in order to place more emphasis on the state's needs of the next several decades, which includes carbon management and economic sustainability practices. This position will supervise the Supervising Engineering Geologist classification, which is the top level licensed engineering geologist in the Engineering Geologist classification series.</td>
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<th>6. Reports to: (Class Title/Level)</th>
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<tr>
<td>CEA B - Chief Deputy of Operations</td>
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7. Relationship with Department Director (Select one)

- [ ] Member of department's Executive Management Team, and has frequent contact with director on a wide range of department-wide issues.
- [x] Not a member of department's Executive Management Team but has frequent contact with the Executive Management Team on policy issues.

(Explain): A senior leadership position to advance strategies to meet the needs of California. This position will report to the Chief Deputy of Operation in CGS, work directly with the State Geologist, and supervise Supervising Engineering Geologists and subordinate staff.

8. Organizational Level (Select one)

- [ ] 1st
- [ ] 2nd
- [x] 3rd
- [ ] 4th
- [ ] 5th (mega departments only - 17,001+ allocated positions)
9. What are the duties and responsibilities of the CEA position? Be specific and provide examples.

The CGS is adapting in order to better address the needs of California, which includes geologic hazards mitigation and preparedness, and climate adaptability, through watershed and carbon management. Both initiatives are consistent with the Governor’s climate goals included in Executive Order N 82-20. The CEA will coordinate the strategies of two programs that focus on hazard preparedness and monitoring in an effort to prepare for, and improve, the state’s ability to recover from natural disasters. The CEA will help focus the efforts on advanced scientific tools and techniques, strengthen partnerships with internal and external stakeholders, and departments that the CGS regularly coordinates with. The CEA will engage with the Chief Deputy of Operations in CGS, the State Geologist, and the Directorate to develop strategies as it relates to seismic hazard management. The CEA will also engage with our partner agencies (Office of Emergency Services, Department of Transportation, and Department of Water Resources) to develop strong partnerships in order to collaborate on hazard mitigation for California. This position will also work with top academic institutions to expand upon research in order to ensure the latest science is being used to monitor, prepare, and mitigate disasters in California.

One of the primary functions of the CEA is to make sure all the programs within the Hazard Monitoring and Preparedness Branch coordinate with other divisions and our stakeholder partners at the statewide, regional, and local levels, to develop strategies to strengthen the State’s preparedness and response to disasters. Additionally, the CEA will develop needs-based strategies to meet the growing needs of our stakeholder partners as it relates to geological and seismic hazards.

The CEA will work with the Chief Deputy of Operations, State Geologist, Director, and executive management to make recommendations on strategies and structures to enhance the visibility of the CGS through:
1. Developing a coordinated effort of hazard mitigation throughout the State.
2. Develop and coordinate an overarching geoscience data strategy within the Department and the California Natural Resources Agency.
3. Prioritization of projects that will enhance the health and safety of the citizens of California.
4. Develop needs-based project plans to use for partner engagement.
5. Create program and project links between division programs and Department goals as it relates to the Natural and Working Lands strategies and hazards.
6. Monitor inter-agency and departmental projects to ensure customer satisfaction is maximized.

This position will also supervise at least two Supervising Engineering Geologists, which is the highest level scientist in the Engineering Geologist classification series.
B. SUMMARY OF REQUEST (continued)

10. How critical is the program's mission or purpose to the department's mission as a whole? Include a description of the degree to which the program is critical to the department's mission.

☑ Program is directly related to department's primary mission and is critical to achieving the department's goals.

☐ Program is indirectly related to department's primary mission.

☐ Program plays a supporting role in achieving department's mission (i.e., budget, personnel, other admin functions).

Description: The Department of Conservation's mission is to balance today's needs with tomorrow's challenges and foster intelligent, sustainable, and efficient use of California's energy, land, and mineral resources. Furthermore, we strive to provide a safe, sustainable environment for all Californians.

The Hazard Monitoring and Preparedness CEA position will lead geologic seismic programs that directly impacts the Department's Natural and Working Lands initiatives including Executive Order N-82-20. In addition, this concept helps meet all of the Department's mission and goals by effectively mitigating hazards and managing for their impacts, including the impacts of carbon and the impact to California's water infrastructure, both on the surface and subsurface. The CEA will work with all of our programs to ensure they are synced in their goals and objectives of the Division's Strategic Framework and that efforts are coordinated from the office of the State Geologist and filters up to the Directorate.
11. Describe what has changed that makes this request necessary. Explain how the change justifies the current request. Be specific and provide examples.

While at the project level, CGS is able to maintain strong partnerships with other departments, however the CGS is unable to build sustainable strategies at the appropriate level in order to meet the most pressing needs of California, such as carbon management, a changing climate, seismic hazard mitigation, and watershed management. Each of the most pressing needs in California are all geologic-based, and the CGS needs to be better positioned with our stakeholders in order to develop strategies in meeting those needs.

To achieve mitigations in the area of hazard management, carbon management, and sustainable groundwater goals, the State, the Department, and the CGS must immediately increase its efforts in managing these initiatives. This includes a more strategic focus on these other initiatives to create more adaptive strategies to meet these goals. These efforts must be intensified immediately because of the goals laid out by the Governor’s Executive Order N-82-20. In order to make long term progress in achieving these aggressive goals, the CGS will need to build more strategic partnerships and focus on more strategic initiatives that directly impact the State’s carbon management and watershed goals, while ensuring the health and safety of all Californians.

This position will also work with our stakeholders in order to develop a strategy to completely overhaul the seismic monitoring system across the state, which is obsolete and outdated. This effort is critical in creating resilient communities that are susceptible to earthquakes and their associated hazards (e.g., tsunamis, landslides, liquefaction). This strategy will not only improve infrastructure resilience in our most vulnerable communities, but also ensure a rapid return-to service of critical structures, including bridges, dams, and the electrical grid. This rapid return-to service can save the state millions of dollars during a seismic event.

Climate conditions are driving rapid changes across California’s land surface and natural system. Not only is carbon neutrality an important goal, but also ensuring that other natural system outcomes such as water supply, food and fiber production, and biodiversity remain viable is critical to environmental and economic resilience. Understanding the impacts of this change depends largely on geoscience data, its availability and quality, as well as, understanding how land and other resources are used today and may be affected by geologic hazards in the future. Because of the historical narrow focus, balkanized geoscience, and land use data gathering, sometimes without digitization, the state lacks the tools needed to plan and respond as change accelerates. This jeopardizes the future economic viability of the state and the ability to address key policy goals already in place, such as current natural and working lands strategies. This position would help lead efforts that mitigate these issues across the state.
C. ROLE IN POLICY INFLUENCE

12. Provide 3-5 specific examples of policy areas over which the CEA position will be the principle policy maker. Each example should cite a policy that would have an identifiable impact. Include a description of the statewide impact of the assigned program.

1. Seismic hazard identification and infrastructure resilience
   As it stands today, approximately 70% of the seismic recorders across the state are obsolete and outdated. Additionally, many of our hazard maps, which are used to identify earthquake hazards across the state, are over 20 years old or have not been created at all. A lack of strategic focus over the last two decades has created a critical hole in one of California’s most common hazards. These maps and infrastructure are critical for improving engineering in our structure to create more resiliency and to our local land use planners. Also, with the increased focus on carbon management, and the need to store carbon in the subsurface, more needs to be known on the impacts of such actions. While there is a strong science component to this, there is a need to build strong partnerships with our stakeholders (Cal OES, Caltrans, DWR, ARB, USGS) in order to ensure climate and hazard-smart land use strategies are utilized. This position must work closely with the State Geologist, the Directorate, and other Division leads to strategize with our most critical stakeholders in order to develop land use polices that will assist in achieving the desired objectives as laid out by the State.

2. Assess the increase in potential hazards related to climate and carbon management
   As California strives to meet climate and carbon management goals as laid out by the Administration, there will be an increased focus on ecosystem function and services due to the rapid changes in California’s climate and safe processes related to carbon management; including capture, sequestration, and storage (CSS). There will be an increased need to find safe ways to sequester carbon in the subsurface. This will require detailed subsurface mapping to determine appropriate reservoir storage and porosity characteristics. In addition, new challenges will emerge (induced seismicity, reservoir characterizations) and being able to manage this will improve the safety of sequestration as a strategy for California. The CGS is positioned well to evaluate the risks of CSS in order to minimize risks and maximize carbon reduction. This position will develop policies around the strategy of CSS in the subsurface to ensure the safe sequestration and storage of carbon.

Sea level rise is a direct result of climate change and is also going to impact land use decision across the state. Building resilient coastal communities that address both the threat of tsunamis and sea level rise is critical to the California economy. The CEA will be responsible for reviewing policy across the states as it relates to these and other hazards, which is critical for the sustained economic viability of California.

3. Geoscience data strategies for the subsurface and critical infrastructure
   Geoscience data across the state is balkanized and collected in a manner that does not leverage the maximum potential of that data. This position will help focus on subsurface data that directly relates to carbon sequestration and storage. The CEA will develop policies that will allow for the sharing of subsurface data with various departments and agencies (CalGEM, DWR, Water Boards, USGS), which will be critical to developing safe strategies for carbon management. Additionally, one of California’s most prevalent hazards, and the one that has the largest potential to significantly damage infrastructure and the economy, is a large earthquake. The CGS is going to undertake a 5-year project to replace the current seismic monitoring infrastructure with modern technology that will be able to provide real time monitoring of critical infrastructure and allow for a rapid return to service of those critical infrastructure. This is critical for California’s economic viability in a post-event situation. The CEA will have a lead role in developing a sound data strategy and policies that will maximize data use for the health and safety of all in California and our partners (Caltrans, Department of Healthcare Access and Information, PUC).
C. ROLE IN POLICY INFLUENCE (continued)

13. What is the CEA position’s scope and nature of decision-making authority?

The proposed CEA’s scope for decision making will be related to hazard monitoring and preparedness. This is inclusive of seismic hazards mapping, infrastructure monitoring, and landslides across the state. This position will coordinate between the six program areas within CGS and the four program Divisions within the Department. This position will be responsible for ensuring that the subordinate three program areas are working to coordinate together and do not conflict with the goals of the CGS, the Department or State.

The CEA will also be responsible for ensuring all policies and procedures meet the State’s objectives and goals, and work within the constraints of other state entities. The CEA will coordinate all Departmental policies and procedures with other state and local entities, the private sector, stakeholders, the federal government, and the Director’s office.

The CEA reports directly to the Chief Deputy of Operations within CGS. All decision-making authority lies with the Chief Deputy of Operations and the State Geologist, but either position may delegate some of their authority to the CEA. The CEA will be responsible for providing good judgment on day-to-day decisions and seek guidance on decisions impacting the State.

14. Will the CEA position be developing and implementing new policy, or interpreting and implementing existing policy? How?

The CEA will work with the State Geologist, Chief Deputy of Operations for CGS, Directorate of DOC, Division Directors, federal partners, state entities, local governments, and interested stakeholders on implementation of policies related to geoscience hazards and their impacts to natural and working lands management. The CEA will also work with the same set of partners to examine current policies for their effectiveness and success, and recommend modifications to such policies as needed.