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Mr. Tim Haddad
Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

October 16, 2007

**SUBJECT: COMMENTS ON FINAL ENVIRONMENTAL IMPACT REPORT FOR
LAWSON'S LANDING MASTER PLAN, COASTAL PERMIT, AND TIDELANDS
PERMIT**

Dear Mr. Haddad,

Grassetti Environmental Consulting (GECO) was retained by the Environmental Action Committee of West Marin (EAC) to conduct a peer review of the Final Environmental Impact Report (FEIR) on the Lawson's Landing Master Plan, Coastal Permit, and Tidelands Permit. I submitted comments on the Draft EIR in August, 2005. The comments herein focus on the adequacy of the responses to our (and other) comments on the Draft EIR, and, by extension, on the adequacy of the FEIR. These comments are based on my review of applicable documentation, past experience in the area, and over 23 years of professional experience preparing and reviewing CEQA documents.

OVERVIEW

The Draft EIR was distributed to the public in the summer of 2005 and hundreds of comments were received questioning the adequacy of that document. The County has spent over two years preparing the Final EIR, which includes over 700 pages of comments and responses. However, it includes minimal revisions to the Draft EIR analysis. The primary revision is to re-label the document as a program EIR rather than a project-level EIR. In so doing, and as stated in numerous responses to comments, the County acknowledges the lack of specificity in the Plan and in the environmental review, but asserts that such a lack of specificity is acceptable for a program EIR on a Master Plan. The program/plan level of analysis is repeatedly used to rationalize lack of detailed studies, project description deficiencies, and failure to provide information requested in public and agency comments.

As described below, the level of detail in the plan and FEIR are inadequate to allow decision makers and the public to consider environmental impacts, mitigations, and alternatives associated with the requested approvals. Further, if the requested information is not provided at this time, and the County approves the requested Master Plan, the County will lose the CEQA authority to require the applicant conduct many of the more detailed reviews requested by many of the commenters because future County permits would be very limited in scope.

GENERAL CEQA SUBSTANTIVE MANDATE

As summarized in Remy, et al, 2007, 'Unlike NEPA, CEQA has not been characterized as merely a "procedural" statute. Rather CEQA contains a "substantive mandate" that agencies refrain from approving projects with significant environmental effects if "there are feasible alternatives or mitigation measures" that can substantially lessen or avoid those effects.' As noted by the California Supreme Court, CEQA "protects not only the environment but also informed self government" (Citizens of Goleta Valley v. Board of Supervisors, 1990). CEQA's environmental protection role cannot be achieved if an EIR assumes "best case" impacts and outcomes of mitigation measures. Achieving CEQA's mandates requires a critical review supported by fact, and not conjecture.

CEQA REQUIREMENTS FOR RESPONSES TO COMMENTS

CEQA statutes note that "The evaluation and response to public comments is an essential part of the CEQA process. Failure to comply with the requirement can lead to disapproval of a project" (Discussion following CEQA Guidelines section 15088). As noted in the Guide to CEQA (Remy, Thomas, Moose, and Manly, 11th Edition, Feb 2007), CEQA Guidelines require that written responses must describe the disposition of "significant environmental issues" raised in the comments (e.g. suggestions for revisions to the proposed project to mitigate anticipated impacts, such as those made in Comments 30-14 and 30-15) as well as specifically explain its reasons for rejecting suggestions received in comments. Per CEQA Guidelines Section 15088 (c), "There must be good faith, reasoned analysis in response. Conclusatory statements unsupported by factual information will not suffice."

With respect to comments suggesting specific additional mitigation measures or alternatives to be analyzed in the EIR, the courts have found the arbitrary rejection of such measures by a lead agency inadequate where the measures are feasible and would reduce environmental impacts. As noted in the Los Angeles Unified School District v. City of Los Angeles (1997) decision, "An EIR need not analyze every *imaginable* alternative or mitigation measure; its concern is with *feasible* means of reducing effects. In keeping with the statutes and guidelines, an adequate EIR must respond to specific suggestions for mitigating a significant environmental impact unless the suggested mitigation is facially infeasible. While the response need not be exhaustive, it should evidence good faith and a reasoned analysis.

CEQA REQUIREMENTS FOR MITIGATIONS AND ALTERNATIVES

CEQA requires that EIR's include mitigation measures that avoid, minimize, rectify, or reduce (in that order of preference) potentially significant environmental impacts of a project. EIRs are required to discuss the potential impacts of mitigation measures. In addition, mitigation measures must be fully enforceable through legally binding instruments (e.g. conditions of approval and/or mitigation monitoring program.)

With respect to alternatives, "...the requirement to set forth project alternatives within the document is also crucial to CEQA's substantive mandate that avoidable significant environmental damage be substantially lessened or avoided where feasible." (Remy, Thomas, Moose & Manly, 2007). In addition, the No Project Alternative must consider

“...what would be reasonably expected to occur in the future if the project were not approved, based on current plans and consistent with available infrastructure and community services” (CEQA Guidelines, Section 15126.e.2).

FEIR DEFICIENCIES

Overview

A review of the FEIR and its Responses to Comments indicates that it fails to achieve any of the above-referenced CEQA requirements. Many, if not most, of the responses to comments effectively dismiss without real analysis comments requesting additional information on the Master Plan, baseline conditions, detailed analyses, mitigation measures, and reasonable alternatives that effectively mitigate project impacts.

Improperly Deferred Analysis

The EIR (Master Response #1), states that the master plan needs only to “lay out the general parameters of a proposed development and its resource protection features, and rely on a subsequent precise development plan or other improvement plans to define the precise details of location, design, and engineering related to construction of the development and its supporting facilities...”(p. 8-33). There is no indication in the EIR of what aspects of the master plan, if any, require precise development plans; there is no commitment to conduct precise development plans for any aspect of the master plan; and there is no indication of what level of CEQA review, if any, would be triggered by precise development plan. The only required subsequent project permits are site-specific permits for the construction of the sewage system, new restrooms, water tank, boathouse, lighting, employee mobile home, owner’s residence, and gatehouse. None of these permits would permit a reevaluation of the overall effects of permitting the camping uses on the site, the appropriate number of campsites, the appropriate locations of campsites, or alternatives to the overall project layout, density or locations. Moreover, it is unclear which of these permits, if any would trigger subsequent CEQA review. Therefore all responses that refer the commenter to future studies with respect to all aspects of the project other than those that would be covered by specific permits listed above result in an inappropriate deferral of analysis or, more likely, no future analysis at all.

Master Responses

The EIR relies on a number of Master Responses to comments repeatedly made by public agencies (including agencies with expertise and jurisdiction over affected resources), elected officials (including County Supervisors), citizens groups, technical experts, and the general public. These master responses generally support the proposition that the DEIR was adequate, and that the additional information requested by commenters are not necessary to serve CEQA’s mandated purposes. As described below for critical responses, this is incorrect.

Master Response #1: Adequate Level of Detail

Master Response #1 basically sets forth the proposition that a Program EIR need not include the level of detail requested by commenters. Commenters ranging from the National Park Service, California Water Resources Control Board, California Regional Water Quality Control Board, California Coastal Commission (see, for example,

comment 6-8), California Department of Fish and Game, North Marin Water District, and several Marin County Planning Commissioners all commented that the project description and environmental impact analysis did not provide adequate information for them to exercise their statutory mandates to protect the environment and make informed decision making. The responses to their comments were, essentially argumentative, stating that the commenters were in error and that the EIR authors believe that it does include enough information. This is inadequate to serve CEQA's purposes. Simply put, if the document does not provide information deemed essential by responsible and permitting / decision-making agencies, especially those charged with protecting the environmental resources, it fails to comply with CEQA's mandate. The absurdity of the EIR telling agencies with acknowledged expertise and regulatory authority that they are wrong and it is right in determining what information they need cannot be overstated. Master Response #1 does exactly that, and, in so doing is inadequate on its face.

Master Response #2: Environmental Baseline

In this response, the FEIR contends that use of a "maximum past use" baseline is adequate to serve CEQA's purpose. Again, many agencies and experts commented that such a baseline results in an artificially minimized impact significance (because the change from the baseline to the project is minimized) that does not reflect the reallikely impacts of the project. The EIR authors turn this fact on its head by claiming that ""Any reduction in use levels at the project site would only serve to reduce existing adverse environmental impacts compared to those documented [sic] in the EIR." The FEIR assumes existing use levels that "corresponded to limiting occupancy of the site to 233 travel trailers, 1,000 vehicles for campers, and 200 vehicles for day users at the project site (p. 8-38). These limitations are for peak use and, as acknowledged in the FEIR (p. 8-380) infrequently occur at the facility. This acknowledgment is consistent with evidence presented in my 2005 comment letter that average use levels are far lower that those assumed by the EIR. The analyses in the EIR do not reflect actual, on the ground uses, but a mostly hypothetical set of circumstances that happens at best, a few times per year, and could not possibly happen at the time of the FEIR because of limits on use established by the applicant. This results in the EIR failing to report the real impacts of the project (see, for example, responses 11-29 (the use levels assumed in response to comment 11-29 are arbitrary, based on self-imposed limits that can be readily altered), 13-1, .and 22-6).

Master Response #3: Wastewater Treatment

Technical experts and responsible agencies all commented that the level of analysis of the wastewater treatment alternatives is inadequate. In fact, the project applicant's engineers stated that the location of the alternative sites "poses potentially serious water source protection problems which are not disclosed in the EIR." (see comments 25-3 and 25-4). Responsible agencies complained that could not assess this impact because the EIR failed to include adequate information for such an assessment. In addition, the technical studies done for the treatment plant used best-case assumptions (such as the rain gauge with the lowest rainfall of any of the 5 gauges in the region) in their assessments (see responses to comments 26-17 and 26-18). For all of these reasons, this response fails to meet even minimal CEQA disclosure requirements.

Master Response #4: Disagreement Regarding Conclusions

The Response characterizes many of the comments as CEQA-permissible disagreements among experts, thereby avoiding developing responses and additional information in response to the experts' comments. In many cases, the comments are not disagreeing with the conclusions, but are setting forth information that shows the information in the EIR to be false, or raises serious environmental concerns. Instead of addressing the concerns and facts provided in the comments, the EIR dismisses them as "disagreement among experts" and provides no substantive analysis, to the extent of ignoring factual evidence provided in the comments.

Other Impermissible Responses

The FEIR uses a number of other strategies to avoid addressing substantive environmental comments, as summarized below.

Failure to Respond to the Actual Comment

A large number of responses refer the commenter to master responses that do not respond to the comment at hand. Other responses miss the gist of the comment, and thereby fail to respond to it. Examples of this include, but are not limited to: Comments 3-4, 3-9, 5-9, 5-11, 5-17, 9-2, 30-17, 30-18, 30-19, 30-26, 30-31, 30-34, and 30-42.

Deferral to Merits Hearing

A number of important comments on substantive environmental issues are not responded to because the FEIR falsely claims that they are "Merits Issues". Examples of this include, but are not limited to: Comments, 11-36, 12-20, 12-27, 30-36, 30-54, 30-60, 30-83, and 30-84.

Claims that Responses Require Undue Speculation

Many responses avoid substantially addressing the issue raised because the EIR feels that the response would be "speculative". Chief among these is the failure to include an adequate no-project alternative that assumes elimination of all unpermitted uses on the site. Despite numerous requests for such an alternative, including several from state and federal regulatory agencies and County Planning Commissioners, and despite evidence developed by the County as to which uses were permitted and not, the EIR steadfastly holds on to the claims that it can neither determine the permitted uses nor assure enforcement of the permitted uses even if they were to be determined (see, for example, responses 24-5 and 30-4). Taking this argument to its logical end, why should the EIR assume compliance with the Proposed Master Plan, if cannot enforce its existing plans and permits? Further, an alternative where the county actually enforces its land use regulations is certainly less speculative than one proposing a large hotel on the site, when none has been proposed by the applicant. It should be noted that all alternatives are inherently speculative. The "speculative" argument used to avoid full assessment of alternatives, in addition to being specious, undercuts CEQA's disclosure and environmental protection mandates.

Failure to Respond in Good Faith

As noted above, CEQA requires good faith efforts at responding to comments. In several cases, the EIR does not do this. An example of this is response to comment # 3-

13, where the US National Park Service refers the EIR to important data sources regarding biological resources, and the EIR, instead of seeking out those sources, fails to review them because the commenter does not include the referenced data within the comment. Other examples include responses to comments 18-40, 30-11, 30-40, and 30-63.

Failure to Defer to Responsible Agencies with Greater Expertise

In a number of cases, the EIR responds that an agency with expertise and authority over a given environmental resources is incorrect in its comments on that resource. For example, in response 6-6, the EIR, with no factual basis, disagrees with the Coastal Commission's interpretation of its own regulations. CEQA case law clearly indicates that, absent facts to the contrary, deference shall be given to responsible agencies with expertise on their resource area.

Failure to Support Responses with Fact or Evidence

A number of the EIR's responses are inadequate because they are not supported by fact or evidence. See, for example, responses 11-39 (EIR uses outdated sea level rise information: see attached memo from CALFED indicating sea level rise may occur much more rapidly than assumed in this EIR), 11-53, 12-17 (no evidence that building code even applies to leach fields), 27-5, 30-25 (EIR contains no evidence that sufficient space exists for planned use levels while avoiding sensitive habitats), and 30-27.

Response Refers Reader to EIR Section That Comment Stated Was Inadequate

In several responses, the EIR directs the commenter to the very same section of the DEIR that the commenter found inadequate. This does not provide a substantive response to the comment. See, for example, response 18-45, which does not address the request for more information about potential impacts on the Western Snowy Plover of a trail system and of campground food and garbage.

CONCLUSIONS

As summarized above, the FEIR fails to adequately respond to the numerous agency and public comments on the DEIR. This has resulted in a document that fails to meet CEQA's twin mandates to support informed decision-making and reduce impacts to the public. Note that because of the massive size of the document and short review period, it was not possible for me to list all of the deficiencies in the document. Suffice it to say that the responses to comments does not meet CEQA requirements for such responses. Please feel free to call me at 510 849-2354 to discuss any of the items in this letter.

Sincerely

Richard Grassetti
Principal
Grassetti Environmental Consulting

ATTACHMENT A: CALFED SEAL LEVEL RISE MEMO

September 5, 2007

Memo to: John Kirlin, Executive Director, Delta Blue Ribbon Task Force

From: Mike Healey, CALFED Lead Scientist

Subject: Projections of sea level rise for the Delta

Recognizing that sea level rise would likely be an uncertain but contentious issue for the Vision Task Force to address, the Science Program requested that the Independent Science Board examine the current literature and offer comments and, if possible, recommendations on sea level rise to aid the Task Force. The response of the ISB is attached to this memo. In my opinion, the ISB has provided a very helpful summary of the extensive and confusing science around climate related sea level rise. They also make specific recommendations concerning which of the many projections of sea level rise should guide the Task Force in developing its vision.

Key points made in the ISB memo are first, that current projections of sea level rise by the IPCC are likely very conservative as the models used to develop these projections under-estimate recent measured sea level rise. Second, extrapolation from empirical models of sea level rise yields significantly higher estimates of sea level over the next few decades than the IPCC projections. The ISB suggests that the empirical projections are probably a better basis for short to mid term planning. And, third, that neither approach to estimating future sea levels takes account of melting of ice in Greenland and Antarctica, which recent studies suggest is accelerating.

Based on their analysis, the ISB suggests that a mid range rise in sea level this century is likely to be at least 70-100 cm, significantly greater (~200 cm) if ice cap melting accelerates. While the absolute rise is alarming enough, even more alarming is the fact that only a few cm of sea level rise will greatly increase the frequency, intensity and duration of extreme water levels. It is these events that pose the greatest risk to Delta levees, infrastructure and private property.

The ISB assessment of rates and magnitude of sea level rise greatly increases one of the key risk factors in decisions about land use, levee integrity, water conveyance, public safety and other important considerations in the Delta Vision. In my view, it is essential that all the current planning processes take the likelihood of greater sea level rise into account. This is particularly

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true for the DRMS study, which did not factor any sea level rise into its assessment of levee needs in its draft phase 2 report.

I trust that you will convey the ISB memo to the Task Force. I will copy it to DRMS, BDCP, ERP and other interested parties. Please let me know if you or the Task Force have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike Healey".

Mike Healey

CALFED Lead Scientist

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September 4, 2007

TO: Michael Healey, Lead Scientist

CALFED Bay-Delta Program

FROM: Jeffrey Mount, Chair



CALFED Independent Science Board

RE: Sea Level Rise and Delta planning

In July of this year, you asked that the Independent Science Board (ISB) examine the array of sea level rise projections available in published reports and, based on current scientific understanding, advise the Science Program about which projections are most appropriate for incorporating into on-going planning for the Delta. The ISB discussed this issue at their August, 2007 meeting and have developed recommendations detailed in this memo. It is important to note that this is not an assessment of the state of sea level rise science, but is intended to highlight the large uncertainty in sea level rise projections and recommend ways to incorporate this uncertainty into planning.

Background

Sea level plays a dominant role in the San Francisco Bay-Delta. Water surface elevations and associated fluctuations due to tides, meteorological conditions and freshwater inflows drive Bay-Delta hydrodynamics. Hydrodynamics, in turn, dictate the location and nature of physical habitat, the quantity and quality of water available for export, and the design of the flood control/water supply infrastructure. Change in sea level has the potential to substantially alter Bay-Delta conditions and to constrain future management options.

Global sea level rise is a well-documented phenomenon, both in the paleoclimatic record as well as the historical record. Tidal gage records indicate that sea level during the 20th century has risen an average of 2mm/yr (.08 in) during a period of 0.7°C warming. Recent studies suggest that since 1990 global sea level has been rising at a rate of approximately 3.5 mm/yr (.14 in/yr)¹. The cause of sea level rise stems from two processes: 1) thermal expansion of sea water as the surface

¹ Church, J.A and N.J. White 2006 *A 20th Century Acceleration in Global Sea-Level Rise* Geophysical Research Letters, v. 33, article no. L01602

layer warms, and 2) increase in mass of sea water associated with melting of land-based glaciers, snowfields and ice sheets.

Recent research supported by the California Energy Commission² (CEC) and continued under the CALFED-sponsored CaSCADE program, shows that sea level rise will impact the Delta principally by increasing the frequency, duration and magnitude of water level extremes. These extreme events occur at various periodicities and are associated with high astronomical tides and Pacific climate disturbances, such as El Niño. The CEC study showed that under moderate climate warming and a sea level rise of 3 mm/year (12 in./century), extreme high water events in the Delta--those that exceed 99.99% of historical high water levels and severely impact levees--increases from exceptionally rare today to an average of around 600 hours/year by 2100. This work also showed that roughly 100 of these hours would coincide with very high runoff conditions, further amplifying the impacts of sea level rise. In sum, even under modest sea level rise and climate warming projections, extreme high water levels that are considered rare today will likely be very common by the end of this century.

Sea Level Rise Projections

Early in 2007, the Intergovernmental Panel on Climate Change (IPCC) released its latest assessment of the scientific basis for projections of future climate conditions, including global average sea level rise³. As noted in the press, in comparison with the IPCC's 2001 assessment, the latest sea level rise projections appear to have narrowed the range of potential sea level rise and lowered the magnitude of projected sea level rise. This was viewed by some outside of the IPCC as indication that: 1) uncertainty regarding sea level rise had decreased and 2) the problem of sea level rise itself appeared to be less than originally stated. However, both the methods used to derive the IPCC 2007 sea level projections, along with extensive new published research in 2007 suggest that this more optimistic view of future sea level rise may be unwarranted.

The IPCC projections are based on physical models that attempt to account for thermal expansion of the oceans and storage changes in land-based glaciers and ice fields. These models, by necessity, simplify the complex processes of ocean circulation and ice melting. The IPCC midrange projection for sea level rise this century is 20-43 cm (8-17 inches), with a full range of variability of 18-59 cm (7-23 inches). The range of variability reflects model differences and uncertainties as well as differences in greenhouse gas emission scenarios. The IPCC model effort is consensus-based, reflecting the agreement of numerous international scientists.

² Cayan, D. *et al.* 2006 *Projecting Future Sea Level California Climate change Center White Paper CEC-500-2005-202-SF* Accessed at <http://www.climatechange.ca.gov/research/climate/projecting.html>

³ IPCC 2007 *Climate Change 2007: The Physical Basis—Summary for Policymakers* Accessed at <http://www.ipcc.ch/SPM2feb07.pdf>

During the past year, there have been major advances in the science of sea level rise. Paradoxically, these advances have increased the uncertainty of projections in sea level rise, at least temporarily. These advances have also led to strong criticism of the approach that the IPCC used in establishing its projections⁴. One criticism is that the models used to project sea level rise tend to under-predict historical sea level rises, most notably failing to capture recent increases. Indeed, models that use empirical historical relationships between global temperatures and sea level rise perform better than the IPCC 2007 models⁵. When applied to the range of emission scenarios used by IPCC 2007, empirical models project a mid-range rise this century of 70-100 cm (28-39 in.) with a full range of variability of 50-140 cm (20-55 in.), substantially higher than IPCC 2007 projections. However, foremost among the criticisms is the failure of the IPCC to include dynamical instability of ice sheets on Greenland and Antarctica in their projections for sea level rise.

Melting of the ice sheets of Greenland and Antarctica has the potential to raise sea level 70 m. For most of the 20th century, the ice sheets have remained relatively stable, with melting contributing a minor fraction to sea level rise. However, during the past year numerous studies have demonstrated that the mass balance (input from snowfall versus losses due to melting or detachment) of these ice sheets is shifting toward more rapid loss, most likely in response to warming of the atmosphere and oceans⁶. The recent rate of mass loss in these ice sheets exceeds current physical model predictions. As many authors have pointed out, increased rates of ice sheet flow, involving meltwater lubrication of the ice sheet bed or the removal of buttressing ice shelves, may be accelerating the rate of ice loss on Antarctica and Greenland. The IPCC 2007 report explicitly chose not to incorporate the uncertainty associated with this process into their sea level projections. Recent publications that have examined this issue suggest that, under business as usual emissions scenarios, dynamical instability of ice sheets may add as much as 1 m (39.4 in) to sea level rise by 2100⁷.

Recommendations

The ability of current physical models to project sea level rise are limited. This stems in part from our poor understanding of and current inability to model the response of Greenland and Antarctic ice sheets to atmospheric and oceanic warming. Given the costs associated with levee

⁴ summary in Kerr 2007 *Science NOW* Accessed at <http://Sciencenow.sciencemag.org/cgi/content/full/2007/215/2>

⁵ Rahmstorf, S 2007 *A Semi-Empirical Approach to Projecting Sea-Level Rise* *Science* v. 315, pp. 368-370.

⁶ Shepherd, A. and D. Wingham 2007 *Recent Sea-Level Contributions of the Antarctic and Greenland Ice Sheets* *Science*, v. 315, pp. 1529-1532.

⁷ Hansen J *et al* 2007 *Dangerous human-made interference with climate: a GISS modelE study* *Atmospheric Chemistry and Physics*, v. 7, pp.2287-2312.

failure in the Delta, the ISB feels it would be a mistake for the various planning processes now underway (BDCP, Delta Vision, DRMS) to base their planning on the conservative 2007 IPCC estimates of sea level rise. Although there is some disagreement about mechanisms of ice sheet disintegration, current advances in understanding coupled with new physical measurements all point toward the same conclusion: dynamical instability of ice sheets will likely contribute significantly to future sea level rise, with the potential for very rapid increases of up to a meter (39.4 in.) by 2100 from ice sheets alone. For this reason, the range of sea level projections based on greenhouse gas emission scenarios contained in the IPCC 2007 report should be viewed, at best, as minima for planning purposes.

The board recommends that planning efforts use three approaches to incorporate sea level rise uncertainty. First, given the inability of current physical models to accurately simulate historic and future sea level rise, until future model refinements are available, it is prudent to use existing empirically-based models for short to medium term planning purposes. The most recent empirical models project a mid-range rise this century of 70-100 cm (28-39 in.) with a full range of variability of 50-140 cm (20-55 in.). It is important to acknowledge that these empirical models also do not include dynamical instability of ice sheets and likely underestimate long term sea level rise. Second, we recommend adopting a concept that the scientific and engineering community has been advocating for flood management for some time. This involves developing a system that can not only withstand a design sea level rise, but also minimizes damages and loss of life for low-probability events or unforeseen circumstances that exceed design standards. Finally, the board recommends the specific incorporation of the potential for higher-than-expected sea level rise rates into long term infrastructure planning and design. In this way, options that can be efficiently adapted to the potential for significantly higher sea level rise over the next century will be favored over those that use "fixed" targets for design. After all, the current debates over uncertainty in sea level rise are less about how much rise is going to occur and more about when it is going to occur.