

## Brief Recent History of the Sea Level Rise (SLR) issue in North Carolina

[Note: there were literally hundreds of correspondences, documents, media articles, etc. on this topic. This is a highlight **overview** of what transpired. ([Here](#) is an abbreviated version of what happened to June 2012.)]

1974: [Coastal Area Management Act](#) (CAMA) established goals, commissions, etc. for coastal management.

The [Division of Coastal Management](#) (NCDQM) is the state agency charged with overseeing coastal matters for the twenty (20) NC CAMA counties.

The fifteen (15) member [Coastal Resource Commission](#) (CRC) is appointed by the Governor and is the administrative arm of NCDQM. The CRC designates areas of environmental concern, adopts rules and policies for coastal development within those areas, and certifies local land-use plans.

1996: the CRC selected a 15 member [Science Panel](#) to assist with Science related coastal matters.

2009: The CRC Science Panel is charged with doing a Scientific assessment of what the NC SLR situation will be by the year 2100, specifically: “to provide North Carolina’s planners and policy makers with a Scientific assessment of the amount of SLR likely to occur in this century.”

2009: In parallel, another effort was started by a different agency “[The North Carolina Sea Level Rise Risk Management Study](#)”. Funded by the federal government, this was designed to serve as a template for US coastal communities to be implemented and used as a resource for local, state, and federal governments.

3/2010: the NC SLR Assessment [Report](#) (16 pages) was released by the CRC Science Panel.

1/2011: CRC had a private, closed-door meeting with Carteret County Commissioners about their Report, the rules and regulations that would follow from it, and their implications.

The Commissioners were very concerned about the scientificness of the CRC Report — especially considering the substantial impact the CRC’s proposed regulations would have on citizens.

The Commissioners didn’t have the technical ability to evaluate the CRC report. They asked Rudi Rudolf for an input and he was very helpful (although as a state employee he had to be diplomatic).

The Commissioners also called me to do an independent assessment of the CRC Report. My initial review concluded that it did **not** adhere to scientific standards, and seemed like [Confirmation Bias](#).

I asked my network of 500± scientists for recommendations of SLR experts. I was given 40± names. I emailed the CRC report to those experts: **2** said it looked OK; **36** said that it was a poor effort. I asked the 36 to identify the weaknesses, citing specific studies, etc. to support their position. I received replies from 30±. I edited their answers into a two part, 34 page report.

After getting Rudi’s inputs and my preliminary feedback, the Commissioners [officially complained](#) to Bob Emory (head of CRC) that these proposed SLR regulations were unscientific and onerous.

2/7/11: Mr. Emory responded to the Commissioners letter saying their proposed regulations were only a draft. The Commissioners [wrote](#) Mr. Emory again (2/17/11), objecting to his draft characterization, and repeated their serious concern about the unscientificness of the CRC Science Panel Report.

2/15±/11: When I was well along with this report, I was solicited by Tom Thompson to join [NC-20](#). They had heard about the work I was doing and were supportive of it. He unequivocally assured me that NC-20 was primarily about Science (not economics). I agreed to join forces with them, with that as a condition.

3/1/11: In response to the strenuous objections of the Carteret Commissioners, Mr. Emory sent them a revised [position](#), backing off from the initial wording of proposed SLR related regulations.

3/19/11: I finalized: "[A Scientific Critique of the 2010 'NC Sea-Level Rise Assessment Report'](#)".

3/29/11: I met with Mr. Emory, gave him with a printed copy of the 34 page *Critique*, and reviewed the contents with him. (I followed up with an electronic version.) I asked him to post our *Critique* on their SLR [webpage](#). He said that he would consider it. My hope was that he would set up a meeting with some Science Panel people, and they would then make the necessary changes to their Report.

Note 1: Mr. Emory subsequently declined to post our *Critique* on the CRC SLR web page.

Note 2: Mr. Emory never arranged any meeting with any CRC Science Panel members.

4/11/11; 5/2; 6/13; 6/27; 7/12, etc: I wrote Mr. Emory about getting this matter resolved. No answer.

7/27/11: Mr. Emory said the Report was just an estimate. He didn't discuss its lack of scientificness.

2011/2012: Several [articles](#) appear in NC newspapers from the Science Panel members (including Mr. [Emory](#)), complaining about the criticism of their SLR report. Unfortunately, none of these articles ever brought up the real issue: **that their report was not a Scientific assessment of the NC SLR situation.**

9/21/11: I received a personal email from one of the CRC Science Panel members. They wrote that they had read my *Critique* and liked it. Additionally they said:

*"To my discredit, I did not actively participate in the Science Panel development of the report, as I relied on others on the Panel that seemed to be more engaged in the subject. I was remiss in giving my OK to the Panel's projections..."*

11/15/11: Representative George Cleveland arranged that I and two NC-20 associates give a talk about SLR to NC legislators in Raleigh. We did that and the response was very [favorable](#).

3/19/12: Carteret Commissioners passed a formal [resolution](#) advocating Science-based SLR policies.

4/4/12: After their PR campaign didn't make us go away, the Science Panel tried a different tactic – to issue an update of their report: "[Addendum to the North Carolina Sea Level Rise Assessment Report 2010](#)". The stated purpose of this 9 page document was to answer four questions raised by our *Critique*. Unfortunately, the four questions they posed were **not** the main points of concern identified by the *Critique* (e.g. they did **not** address the key issue: was their Report a true Scientific assessment of NC SLR).

4/24/12: Following a similar methodology that worked well on the first round, I sent this "Addendum" to the 30± SLR experts for their commentary. I edited their helpful responses into a new report called "[Commentary on NC CRC 2010 SLR Report Addendum](#)." This 17 page report went through each of the four Q&A's of the *Addendum* and showed how the CRC Science Panel's answers to their own made-up questions were inadequate and misleading. Additionally it made the point that the Science Panel was still not providing what they were charged to do: **a Scientific assessment to the NC SLR situation.**

4/26/12: The *Commentary* was posted online, and sent to CRC head, Bob Emory. We again recommended that a meeting would be advisable to work this out. We received no response.

4/7/12: Dr. Jeff Warren (who attended my Raleigh talk a few months prior) then drafted up [legislation](#) to prevent the CRC Science Panel's unscientific Report from being used by any state agency for making SLR rules or regulations. The bill, H819, was called "An Act to Study and Modify Certain Coastal Management Policies". Carteret Representative Pat McElraft was designated to be the official sponsor of H819.

Note that Dr. Jeff Warren is the chief aide of Senate Pro-tem leader Phil Berger, and Jeff's PhD is in the oceanography field. (BTW, none of the CRC Science Panel members has a PhD in oceanography.)

4/27/12: I received my first copy of the proposed H819 legislation from Dr. Warren, and he asked me to critique it. I thought that it was very good, but did have a few suggested changes. I marked up that draft version and sent it back to Dr. Warren. The bill subsequently went through a few editorial revisions.

5/17/12: Some of the [first](#) of what turned out to be a barrage of articles about H819 appeared. Almost all of these said essentially the same thing: *this was a confrontation between economic development forces and scientists* (i.e. the CRC Science Panel). Not a single piece stated the true issue: that the *real* scientists were the 30± SLR experts in our *Critique*, who faulted the CRC panel for writing an unscientific report.

5&6/12: There was intensive media coverage on this, including considerable national attention. For example there was a segment on the [Colbert Report](#) lampooning NC legislators (again making up a totally inaccurate — but funny — representation of what was actually transpiring).

6/12/12: There was a NC Senate vote on H819. It [passed](#) 35 to 12.

7/3/12: The bill went to the House where some modifications were made. When it was subsequently brought up on the floor to vote, there was considerable, heated [debate](#). After that, the bill passed 68 to 46.

7/3/12: The Senate ratified the modified version, 40 to 1. It then went to Governor Perdue to sign. The governor has 30 days to sign or reject legislation. (If no action is taken, it automatically becomes law.)

7/12: Some environmentalist organizations started an aggressive [campaign](#) to get their members to write Governor Perdue to reject H819. At one point a news story said that the Governor had received some 4000 letters – and supposedly *every one* said to reject the bill! Following that I started soliciting citizens (and NC organizations) to write in that the Governor sign the bill. Several thousands did.

8/3/12: The Governor chose not to sign the bill, so H819 became [law](#) by statute. The final version requires that the CRC Science Panel do a **real scientific assessment** of the NC SLR situation, by April 1, 2015. In the meantime, state agencies are prohibited from using anything in the 2010 CRC Report to make rules or regulations to coastal communities. In my view this is a big win for Science advocates.

6/14/12: I got a nice thank-you [letter](#) from the Carteret Commissioners — who started me on this trip.

1/30/13: [Senate Bill 10](#), was proposed, which allows the Governor to dismiss all the members of certain committees, including the CRC. (Prior to that he could replace any expiring members with new ones of his choosing). That subsequently became law. Mr. Emory was replaced by Frank Gorham. The original hope was that the new CRC would dismiss most of the existing Science Panel members and appoint more Science oriented people. That has yet to happen.

Since the passage of H819, the CRC Science Panel has had a few meetings, and they [continue](#) to protest that they did a stellar job with their 2010 Report. This denial of the facts is most disturbing.

To this day, some environmental organizations also continue to misrepresent the actual issues involved here. *Carteret Crossroads* February 2013 [newsletter](#) is a good example. They falsely said this was a battle between Science and real estate developers. I wrote their president, provided him with all the salient information, and asked him to make a correction to his members. He has refused.

On 2/21/13 *Carteret Crossroads* had a [meeting](#) where they discussed the NC SLR situation. The speaker, Spencer Rogers (who is on the CRC Science Panel) was quoted in the newspaper as making a seriously false statement. I emailed him and asked if the reporter had misquoted him. In his answer to me he did not say that was the case. I asked that he make a public statement as to what the truth of the matter is, and he refused. My [letter to the editor](#) about this appeared in the *CNT* 2/27/13. See this [background](#).

The *SLR Risk Management Study* was a separate matter, had its own trajectory, but was also a success.

1/30/14: NCDENR issued an [outline](#) about the CRC's advisory Panel.

4/21/14: NCDENR issued an [updated outline](#) on the CRC's advisory Panel.

6/11/14: CRC Chairman Frank Gorham issued his [plan](#) for the advisory Panel and their 2015 SLR Report. *The good parts: a)* only a 30 year period going forward would be reported on (instead of 90 years), and *b)* the Report would have a "peer-review" of sorts done by Dr. Bob Dean and Dr. James Houston.

*The bad part was:* there were four vacancies on the Panel, and several qualified candidates had stepped forward as volunteers. He chose not to add any of them as it might introduce bias to the Panel (1). This left the 2015 NC SLR Report in the hands of the same people whose 2010 NC SLR Report was thoroughly discredited — and who are unrepentant. It is **not** in the best interest of NC citizens or businesses to have just one perspective reflected in a report of this importance.

6/16/14: A [DENR webpage](#) was setup to relay the progress of writing the 2015 NC SLR Report.

6/18/14: I had a series of email [communications](#) with CRC Chairman Frank Gorham, re the Panel.

7/21/14: These are the [Minutes](#) of the first monthly Panel meeting. Note that at no time did the Panel officially discuss what they learned from their rejected 2010 SLR report! The point would be for the Panel to arrive at conclusions as to how the procedures and methodology for generating the 2015 SLR report would be *significantly different* from before — so that H819 type legislation would not be necessary again.

**Audio files for this and all subsequent Panel meetings are found [here](#). These were taped by attending person Dave Burton. Since audio files can be quite large, each meeting is broken up into 2+ segments.**

8/21/14: The *US Land Alliance* submitted some good [Public Comments](#) to the Panel.

8/27/14: Dave Burton wrote an informative [letter](#) to the Panel regarding the term of SLR data needed.

8/28/14: These are the [Minutes](#) of the August monthly Panel meeting. This meeting made clear that the Panel was enamored with the IPCC findings, and would use them as a springboard for their report.

9/03/14: In response to the August meeting I sent this [letter](#) to Mr. Gorham. *No response to date.*

9/24/14: These are the [Minutes](#) of the September Panel meeting. (There was no October meeting.)

9/30/14: In response to the September meeting I sent this [letter](#) to Mr. Gorham. *No response to date.*

11/1/14: *Business North Carolina* has a [cover report](#) on the NC SLR situation. Unfortunately this article is not only rife with errors, but completely misses the essential issue that is at hand. A complaint is filed.

11/18/14: The first draft of the 2015 NC SLR Report is written. They asked that it not have a general redistribution. So respecting that, if anyone would like a copy, please contact me for it.

11/19/14: The Minutes of the November Panel meeting are not yet posted. These are the insightful [observations](#) made during the public comment part of the meeting, by attendee Dave Burton.

11/20/14: I sent this [letter](#) to CRC Chairman Frank Gorham. *No response to date.*

11/30/14: An excellent [Editorial](#) about the NC SLR situation appears in the *Carteret News Times*.

12/11/14: The [second draft](#) of the 2015 NC SLR Report is issued. These are our [comments](#).

12/15/14: The Minutes of the December Panel meeting are not yet posted. These are the [good comments](#) made during the public comment part of the meeting, by attendee Dave Burton.

12/16/14: I sent this [letter](#) to CRC Chairman Frank Gorham. *No response to date.*

12/16/14: Two reasonable media reports about the second draft of the SLR report: [here](#) and [here](#).

12/18/14: At the December meeting [the third draft](#) of the 2015 NC SLR Report was scheduled to be released on this date. The date was subsequently changed to 12/22/14, and it was received 12/29/14. A review of this document revealed that about 75% of the comments we made on the prior version were **not** incorporated into the third draft. Here are our [updated comments](#) for Version #3.

1/1/15: [Version #4](#) of the 2015 NC SLR Report went to Dr. Dean and Dr. Houston. These are our current [comments](#) for that version.

1/21/15: Dr. Dean's and Dr. Houston's [comments](#) on the 2015 NC SLR Report were issued, on schedule.

1/22/15: I sent this [letter](#) to CRC Chairman Frank Gorham. *No response to date.*

1/26/15: Panel met to discuss the feedback from Dr. Dean and Dr. Houston. Essentially they decided that despite the 16 pages of [critiques](#) and [comments](#) they had received from knowledgeable sources, that no consequential changes to their Report were going to be made.

1/30/15: During the last several months, many articles have been published regarding the NC SLR issue. Unfortunately, every single one of these (!) had some serious errors. (Here is an [example](#), and [another](#), and [another](#).) With such careless journalism, it's little wonder that the public is misinformed on this issue.

2/18/15: The Panel [responded](#) to the feedback from Dr. Dean and Dr. Houston. We were expecting an updated Report, but instead got a page and a half justification as to why they weren't going to change anything consequential — despite receiving sixteen pages of corrections...

2/20/15: Dr. Dean and Dr. Houston [responded](#) to the Panel's inadequate answer to their feedback — by effectively resigning as peer reviewers, after calling them out as being unprofessional and unscientific. [*Note: after reported contacts from Mr. Gorham and the Panel, they agreed to stay involved.*]

2/20/15: I sent this [letter](#) to CRC Chairman Frank Gorham. *No response to date.*

2/28/15: Dr. Robert Dean dies unexpectedly. See this [obituary](#) in the *NY Times*.

3/13/15: The Panel had a [new meeting](#) to discuss again the Peer Review critiques. This is a [report](#) on the that meeting, by an attending citizen.

3/18/15: In a communication with Dr Houston he confirmed that he (on his own) will continue to do a critique of the Panel's latest Report.

3/30/15: The Panel [responded a second time](#) to Dr. Houston's critique. His answer follows, which says that he thought they did a better job in responding this time around.

3/31/15: The Panel released their [final Report](#).

4/3/15: This [newspaper article](#) reports that Mr. Gorham is not interested in doing the economic analysis that was part of the original agreement. In exchange for being relieved of this obligation he is going on record stating that the Panel's 2015 NC SLR Report should **not** be used by any state agencies for formulating rules or regulations. We are in full agreement with this compromise.

4/29/15: The Panel had a [public hearing](#) in Manteo. Here are attendee Dave Burton's [comments](#).

*subsequently:* More Public Hearings will be scheduled concerning the Panel's Report.

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