

1 STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

2 NARRAGANSETT BAY COMMISSION

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IN RE: BOARD OF COMMISSIONERS MEETING

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10 DATE: April 27, 2015

TIME: 6:00 P.M.

11 PLACE: Narragansett Bay Commission

Corporate Office Building

12 One Service Road

Providence, RI 02905

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COMMISSIONERS:

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Vincent Meselella, Chairman

18 Robert Andrade

Dr. Richard Burroughs

19 Mario Carlino

Michelle DeRoche

20 Jonathan Farnum

Seth Handy

21 Joseph Kimball

Paul Lemont

22 John MacQueen

Al Montanari

23 Angelo Rotella

Richard Worrell

24

1 STAFF & GUESTS

- 2 Raymond Marshall, Executive Director
Thomas Uva, NBC
- 3 Tom Brueckner, NBC
Jennifer Harrington, NBC
- 4 Laurie Horridge, NBC
Rich Raiche, MWH
- 5 Meg Kew, Clean Water Action
Robert Otoski, CDM Smith
- 6 Kathryn Kelly, NBC
Karen Giebink, NBC
- 7 Dan Berger, PFM
Tom Kutcher, Save the Bay
- 8 Alex Kuffner, Providence Journal
David Bowen, Wright-Pierce
- 9 George Palmisciano, Pare Corp.
Rich Bernier, NBC
- 10 Jason Galego, NBC
Ambar Espinoza, RI Public Radio
- 11 Jamie Samons, NBC
Paul Nordstrom, NBC
- 12 Jennifer Jorden, McMillen Jacobs Associates
Talia Girard, NBC
- 13 Karen Musumeci, NBC

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1 (MEETING COMMENCED AT 6:06 P.M.)

2 CHAIRMAN MESOLELLA: Thank you
3 everyone, for coming tonight. It is going to be
4 an interesting night. I think we're going to
5 learn a lot. So, this is not a formal board
6 meeting, it's an informational meeting. So,
7 we're going to hear a lot tonight. Tom is going
8 to be presenting. I don't know who else is
9 going to be presenting.

10 MR. BRUECKNER: Karen Giebink and
11 Ray.

12 CHAIRMAN MESOLELLA: And so, while
13 we're having a bite, you're going to use the
14 screen?

15 So let's hear where we are with
16 this project. All right, Tom, proceed.

17 MR. BRUECKNER: So, I'm going to
18 make a brief presentation to you tonight. It's
19 only 57 slides, but we'll make them so fast, and
20 if you want to ask questions during the
21 presentation feel free because you might forget
22 the question by the time we get to the end.

23 The real purpose of tonight's

24 presentation is to try in a very simple way

25 present with the issues are for Phase III,

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1 selection of the alternative. And I've also
2 tried to during the Board meeting some questions
3 came up when we talked about Phase III. So I
4 wanted to touch on some of those issues, and see
5 if I couldn't explain them and maybe provide the
6 answer to them before these questions are asked
7 again.

8 So, I'll get right to it here. So,
9 going back to the slide that you've seen before.
10 Why are we doing this CSO Control Program? And
11 I said, "What is required by the Clean Water Act
12 for combined sewer overflow control," and I'm
13 only focusing on combined sewers because that's
14 the topic before us.

15 So, first of all, we need to meet
16 water quality standards all the time. And,
17 actually, that's difficult to do because it is
18 cost prohibitive to meet standards for all the
19 storms. We designed to a three-year storm in
20 the previous phases, and you can get storms that
21 are up to 20, 25 years, 50 years. There's no
22 way that we could build facilities that would

23 accommodate all those storms.
24 So, in reality, it is impossible to
25 meet standards all the time. Recognizing that,

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1 EPA has said, "Okay, how do we determine what it
2 is you have to build to meet standards that you
3 can't actually meet?" So what they said is,
4 "Spend what you can afford." And I think this
5 is probably the most important line in the
6 presentation tonight. "It's spend what you can
7 afford." It's not, "Spend what is cost
8 effective," which you would think would be
9 sensible and what you should do, but that's not
10 what we operate under. It's spend what you can
11 afford.

12 So affordability by EPA criteria is
13 based on 2 percent of median household income,
14 and we reevaluate the program every five years.
15 If at the end of five years you've done your
16 program and now you can afford to do more, you
17 can afford to spend more money, well, then you
18 go to the next step and you continue to spend
19 money until you can no longer afford to spend
20 money.

21 I think that's the primary thing
22 that's important tonight, and then we'll talk

23 about affordability later and what it actually
24 means. So I want to focus on the three
25 alternatives that we talked about at the last

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1 meeting; 1, 2 and 3. We eliminated number 4
2 because it just didn't meet the water quality.
3 It didn't really do well in the water quality
4 impact analysis, which is that component where
5 you have to meet the standards.

6 So, why don't we meet water quality
7 standards in wet weather? Well, the primary
8 pollutant of concern for CSOs is bacteria, and
9 there are other sources of bacteria besides the
10 CSOs, and they are stormwater and they're the
11 wastewater treatment facilities.

12 Now, as we get onto the
13 presentation a little bit, you'll see in the
14 water quality modelling. We talk about
15 tributaries, and the tributaries also have a
16 bacterial load associated with them, but that
17 primarily is from stormwater that goes into the
18 rivers.

19 Just to refresh your memory about
20 what a combined sewer is versus sanitary or
21 separate storm sewer. We have a combined sewer

22 system so sanitary flow and stormwater runoff
23 from streets that gets into catch basins all
24 goes into the same sewer and to the treatment
25 plant. When it rains and we don't have

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1 capacity, that combined sewer overflows. When
2 you have a separate sanitary and stormwater
3 sewer system there are two pipes.

4 There's a stormwater pipe that
5 takes just the stormwater flow that discharges
6 during wet weather, but the sanitary flow in a
7 non-combined system goes to the treatment plant
8 all the time; in wet weather or in dry weather.

9 So, what can be done to control CSOs to meet
10 water quality standards? There are really only
11 a few things on the plate that you can do. You
12 can do green infrastructure, and that prevents
13 storm flow from getting to the combined storm
14 sewer or the combined sewer.

15 You can do sewer separation so that
16 prevents the stormwater from getting into the
17 combined sewer because you have a separate pipe
18 for the stormwater. You can do storage and
19 treatment where you take the flow that is in the
20 combined sewers. You take the overflow from the
21 combined sewer and you divert it to a holding

22 tank or a tunnel instead of having it go to the
23 river. Or, you can provide treatment of that
24 overflow right at the point where it overflows.
25 You can do screening and disinfection.

8

1 COMMISSIONER BURROUGHS: Could you
2 just say a word about the fecal coliform load
3 that we don't control?

4 MR. BRUECKNER: I will in a minute.
5 We'll get to that. That is part of the
6 presentation later on. So, those are the four
7 things that we can do. And I think that we've
8 talked about -- the bottom three are called
9 "Gray Infrastructure," they're gray, as you can
10 see. And then we have green infrastructure,
11 which is green. So, green infrastructure. I
12 just want to talk about it briefly because we
13 really haven't talked about it that much, about
14 what it is.

15 So, there are -- if you have a
16 street and you typically now would have runoff
17 that would go into a catch basin here, that
18 would go into a storm sewer or into the combined
19 sewer. When you have green infrastructure, you
20 don't have the catch basin. The flow just goes

21 right into this swale, which is a grassy area
22 between the sidewalks say, and the street, and
23 that's where the water goes. It's captured and
24 goes into the ground. It never makes it to the
25 storm sewer or to the combined sewer.

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1 And, by the way, you can use green
2 infrastructure to via the storm pipes, the storm
3 water to treat it. Or you can use it to combine
4 sewers. It just prevents the flow from
5 getting into those sewers. So this is an
6 example, a picture of a bioretention swale.
7 This is the inlet to the bioretention swale.
8 You can see the flow just goes in and collects
9 in here and drains into the ground.

10 Now, that picture really was like
11 in a suburban area. This really is more like
12 what we deal with in the Providence urban area,
13 Central Falls and Pawtucket. So, this is Grand
14 Broadway, which I think is in Central Falls.
15 You can see this is what the street looks like
16 now. If we were to do green infrastructure on
17 the street, this one shows two options. One is
18 porous pavement, which is this dark area. So the
19 road is crowned. The flow would runoff into the
20 porous area. It would just penetrate into the

21 ground.

22 We also have what are called these

23 rain garden bump outs similar to the bioswale.

24 So this is probably more like what we'd be doing

25 in our CSO area. So, when they -- MWH did their

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1 evaluation of green infrastructure for us they

2 looked at the whole Providence, Pawtucket,

3 Central Falls area to see -- actually, Pawtucket

4 and Central Falls to see what was suitable for

5 green infrastructure? And could we use green

6 infrastructure to eliminate the CSO problem?

7 And the answer was, no, we couldn't.

8 We could at best address 36 percent

9 of the volume. We could reduce CSO volume by 36

10 percent using green infrastructure. The

11 estimated cost for that 36 percent reduction was

12 540 million. And you may remember from previous

13 presentations the alternative one was 740

14 million. So it's not inexpensive. It's --

15 COMMISSIONER BURROUGHS: Could you

16 say a word about the possibility for

17 incentivizing private property owners to adopt

18 green infrastructure, and in specific, why the

19 stakeholders in our analysis put that off the

20 table for this approach?

21 MR. BRUECKNER: Well, I think that
22 we currently do have some programs to get
23 private property owners to do green
24 infrastructure typically when they come in for a
25 sewer connection permit. I think you're

11

1 familiar with that program where if they want to
2 make a modification to the property we require
3 them, as part of the permit process, to
4 eliminate their stormwater from the sewer
5 system. So, that's a program that we're doing
6 now, which has been fairly successful.

7 COMMISSIONER BURROUGHS: Retrofits
8 for existing --

9 MR. BRUECKNER: Yes, they would go
10 into an existing parking lot, say, associated
11 with the facility, and they would put in either
12 underwater storage basins or infiltration basins
13 or infiltrations basins, or porous pavement, or
14 swales. They can do any of those to eliminate
15 the runoff from the parking lot to get into --
16 or from the roof -- to get into our sewers.

17 The other way to incentivize would
18 be to give them a reduction somehow in their
19 rates. Typically, that's done through a

20 stormwater fee, but we don't have a stormwater
21 fee right now that is associated strictly with
22 stormwater. To really make that program work,
23 you have to have a separate stormwater fee,
24 which is typically based on the impervious area
25 of the site. And then as they reduce the

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1 impervious area, they would get a reduction in
2 their stormwater fee.

3 We did look at that a number of
4 years ago instituting that fee, but the problem
5 was that some of the areas in the district are
6 separated and some are combined sewers. We
7 can't charge -- we don't control stormwater
8 sewers so we can't charge for stormwater for
9 those guys. We could only charge it for the
10 people who are discharging to the CSO sewers.
11 And the problem was that we then have a very
12 unfair system where one guy who's on one street,
13 his business is on a street that has got
14 separate sewers would not be paying a fee to us
15 for his stormwater. The guy on the next street
16 who has a tie-in to the CSOs would be assessed a
17 CSO fee or a stormwater fee.

18 So the way institutionally we were

19 set up, it wouldn't work. That's why this talk
20 about the stormwater management district where
21 there would be one district managing all the
22 stormwater in which case you could then apply
23 the fee uniformly. So, right now the way things
24 are set up, we don't think we could really
25 incentivize from a stormwater fee standpoint,

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1 the green infrastructure.

2 COMMISSIONER BURROUGHS: And that
3 would require a legislative change at this --

4 MR. BRUECKNER: For us it would,
5 yes. Okay, so, just going back to the green
6 infrastructure, one of the other issues with
7 green infrastructure, who was going to maintain
8 the facilities? And even if someone could be
9 designated, we're not sure exactly what the cost
10 would be. They could be substantial because
11 green infrastructure is fairly new, and we don't
12 really know what the costs are yet for
13 maintaining it over a period of time.

14 Okay, so I think the takeaway from
15 this slide is it's not going to do it for all
16 the districts. We need some gray component as
17 well. So, I will just quickly go through these
18 alternatives. You've seen them before.

19 Alternative I is the baseline. It's the tunnel,
20 the interceptors, the Pawtucket Avenue
21 Interceptor and sewer separation.

22 The second one is Alternative II.
23 The site modifications from the baseline which
24 are primarily that we'll be doing a stub tunnel
25 here instead of the interceptor, and we're doing

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1 an interceptor here instead of sewer separation.
2 And I point out that there is not much sewer
3 separation in the modified Alternative 2 because
4 we had just a lot of issues with sewer
5 separation; disruption to the community, and the
6 other issue is we're creating more stormwater
7 that is going to have to be treated later on.

8 Then Alternative III actually is
9 the one that has the longest schedule, and what
10 we did to push out the schedule was we added an
11 interim facility here at Bucklin Point to pick
12 up the biggest overflow, and an interim facility
13 here at 220 to provide disinfection treatment.
14 And that was to do something in the interim
15 until we could afford to do more later on such
16 as building the tunnel.

17 And this slide you've seen. This

18 is the timeline and the cost. So, for
19 alternative one, that's the baseline that's in
20 the conceptual design report, \$740 million. No
21 green infrastructure, and the Pawtucket Avenue
22 Interceptor. The second alternative includes
23 the tunnel, green infrastructure, and a longer
24 schedule. We're going out to 2037, I think, on
25 that one.

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1 Alternative I is to 2026.
2 Actually, I have it here. I can read it off of
3 this. You can't see that too well. It's 2038
4 for Alternative 2. And Alternative III would go
5 out to 2047. I mentioned we'd be doing the two
6 facilities up front in the first two phases.
7 That's the 218 and 220. And then we get to the
8 tunnel late on.

9 And that's, really, to kind of push
10 out the program longer so we spread out the cost
11 over a longer period of time to try and
12 stabilize the rates. The cost for Alternative 2
13 is \$815 million, and for Alternative III is \$924
14 million.

15 COMMISSIONER BURROUGHS: I found
16 this very useful. However, the same day when
17 the consultants reported, it looked like when

18 they figured out how much it cost to actually
19 get the money and apply it, one of the most
20 expensive one turned out to be 1.7 billion in
21 one of their rack ups. So, I need to at some
22 point learn how that happened.

23 MR. BRUECKNER: We'll get to that
24 later on. We've only got 40 more slides to go.
25 So what water quality improvements can we expect

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1 with Phase III. And I think we mentioned that
2 there was modeling that was done as part of the
3 program but the results came in very later. We
4 really haven't spent a lot of time on water
5 quality modeling. So I did want to give some
6 presentation on that tonight just so you can
7 understand what it entailed, and just briefly
8 see what the results are because it actually
9 does effect acceptability of the program by EPA
10 because it has to do with meeting water quality
11 standards.

12 So I don't want to spend a lot of
13 time on this slide, but it's just a model grid,
14 and it just shows the area that was modeled as
15 part of this, which is the Seekonk River the
16 Providence River, and then the Upper Bay. I

17 know one of the questions that Commissioner
18 Burroughs had was, What does the modeling show
19 for the Woonasquatucket and Moshassuck River?

20 Well, we didn't model them, and the model
21 doesn't cover that area.

22 It treats the Moshassuck and
23 Woonasquatucket as a point load delivered right
24 here to the model, and I will talk about that in
25 a second. And this shows how the model was set

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1 up. So we have the Blackstone River, the
2 Moshassuck River, the West River, and the
3 Woonasquatucket. Their contributions for
4 loading, which I'll talk about in a minute, are
5 all added to the model upstream of CSOs. These
6 are all -- these black dots are the CSOs. So
7 the contribution from the rivers upstream of the
8 CSOs is the actual input from outside the CSO
9 area. And for the rivers, the bacterial
10 concentrations you'd see would typically be due
11 to stormwater being delivered to the rivers
12 upstream of the CSOs.

13 MR. BURROUGHS: And it's fair to
14 say that all of the rivers are above the
15 acceptable EPA level?

16 MR. BRUECKNER: In terms of

17 bacteria?

18 MR. BURROUGHS: Yes.

19 MR. BRUECKNER: Yeah, in wet

20 weather they are.

21 MR. BURROUGHS: Yeah.

22 MR. BRUECKNER: And some of them

23 even in dry weather.

24 MR. BURROUGHS: So, what we're

25 getting is not clean stuff?

18

1 MR. BRUECKNER: Correct. It's a
2 contributor to the loading to the bay, which is
3 sort of what we're focusing on, but you actually
4 have to meet water quality standards in all the
5 rivers. But we're focusing on the loads from
6 the CSOs and their impact on downstream rivers
7 which are the Seekonk, the Providence River, and
8 the upper Narragansett Bay, as well as the
9 Woonasquatucket west and the Moshassuck rivers
10 which are the urban rivers, but we'll talk about
11 that in a minute.

12 So I just want to point out that
13 when we talk about tributary loads it's where
14 those green dots -- those blue dots are, that's
15 where the load come in. Then there are also

16 loads from the treatment plants, the Bucklin
17 Point and the Field's Point. And any loads from
18 the treatment plants upstream on the Blackstone
19 are also included in the load that comes in
20 here.

21 So for the three-month storm, which
22 I mentioned is the designed storm that we use
23 for our facilities in Phase I and will continue
24 to use most likely. Assuming that it's
25 affordable, or that it's not a bigger storm

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1 that's more affordable than the three month
2 storm, these are the sources of the loads or the
3 CSOs, wastewater treatment facilities, the
4 tributaries and storm sewers.

5 And those storm sewers are within
6 our district, that is, within the CSO area
7 because there are some separated storm sewers
8 within the area where the CSOs are. A small
9 amount, but there are some. And in terms of
10 concentration you can see that CSOs by far, that
11 240 units per volume, as opposed to treatment
12 plants which are only 4 to 40 because they
13 provide treatment for bacteria.

14 The tributaries range from 200 to
15 2,000 depending on where you are, and the storm

16 sewers are at about 10,000. So a storm drain
17 coming -- discharged from a storm drain, you'd
18 expect to see about 10,000 units. When you look
19 at percent of total bacterial load over that
20 area that's modeled. The CSOs are by far the
21 biggest component, 89 percent.

22 Treatment plants are basically zero
23 because they provide such good treatment even
24 during wet weather. The tributaries are about 4
25 percent. Although they're a small

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1 concentration, they're a large volume. And then
2 the storm sewers because of their higher
3 concentration are about 6.6 percent. Now, I
4 just want to mention that for the tributaries,
5 that load does include storm flow that was
6 discharged to the tributaries.

7 So, if you wanted to get the load
8 down from the tributaries, you would want to
9 treat stormwater discharge into the tributaries.
10 But I think one of the things that this shows is
11 if you really want to control bacteria in the
12 Upper Bay, the Providence River, the number one
13 priority really should be CSOs. You're going to
14 get the most improvement for the money spent.

15 So, when we talk about water quality standards,
16 what are they? This is the Providence River
17 here, it's Class SB, meaning, it is suitable for
18 swimming. And then we have another SB area
19 here, which is the lower Providence River, Upper
20 Narragansett Bay, and then we have the
21 conditional area, A and B, which is the
22 shellfishing areas, which are closed
23 conditionally during rain events. So I think an
24 area is closed after half an inch of rain.

25 MR. UVA: Eight-tenths of an inch

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1 of rain. One and a half inches a day. They
2 relaxed the regulations.

3 MR. BRUECKNER: Right. It was
4 changed since we put it in Phase I. And I'll
5 talk about particularly the area A and B, the
6 shellfishing areas because those are the ones
7 that probably most -- people are most aware of.
8 Now, there's an interesting -- before we do the
9 slide showing the improvements from the water
10 quality modeling, this slide shows the geometric
11 mean -- or, actually, the concentrations from
12 May to October, which is the season that DEM
13 uses for determining compliance of standards.

14 For monitoring NBC has done during

15 dry weather -- now we're talking about basically
16 ideal conditions here -- and you can see that
17 for shellfishing the standard is the light blue,
18 0 to 14, and then we get into the swimming
19 standard is the 14-49 here, and then we wind up
20 with standards that are between -- or numbers
21 that are between 49 and 100 in the dark blue,
22 and then numbers even above that.

23 So we need to meet the light blue
24 for shellfishing and the dark blue for swimming,
25 and you can see that even in dry weather now, no

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1 overflows, we don't typically meet those
2 standards. And the source of that, I'm not
3 quite sure, but I would think that there might
4 be tie-ins to the combined sewers illegally that
5 discharge sanitary flow that impact these
6 waters.

7 I'm not really sure what the other
8 reasons might be, but we do notice that we have
9 -- we're not meeting standards in the upper
10 parts of the bay in the Providence River even in
11 dry weather now. So, that's something that --
12 I'm going to show you the next slide -- you'll
13 see that there is an assumption -- well, let me

14 go through this first. These are the fecal
15 coliform concentrations a half a day after the
16 start of the three-month storm, and this is for
17 -- this is what is modelled for Phase II only.
18 This is what water quality would look like for
19 Phase II.

20 This one is for the tunnel only.
21 Meaning, we only built the tunnel, the Phase III
22 tunnel. We didn't build all the other
23 components, the interceptors, or the sewer
24 separation or anything else. This one is for
25 full Phase III, and this one is for Alternative

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1 IV, which we eliminated, but we're presenting
2 this to show you one of the reasons why we
3 eliminated it, which is the impact on water
4 quality. This one does not perform as well as
5 this one. It performs better than this, but not
6 as good as Phase III. Go ahead.

7 MR. BURROUGHS: I guess my question
8 here is that if you look at the water body east
9 of East Providence, sort of towards the top
10 there, you don't see really any differences all
11 the way across.

12 MR. BRUECKNER: Well, that's
13 correct, but this is for the half-day, I've got

14 more slides. I've got more slides.

15 COMMISSIONER BURROUGHS: But, no,
16 my point is that if we go to full Phase III, if
17 you look at the colored patterns at the top of
18 your diagram, they look suspiciously similar.

19 MR. BRUECKNER: They do.

20 COMMISSIONER BURROUGHS: Between
21 full Phase III and Alternative 4 where we don't
22 build the tunnel. So at least in that stretch
23 of the water body, building the tunnel doesn't
24 deliver better water quality.

25 MR. BRUECKNER: Well, actually it

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1 does because these up here, this is the worst
2 water quality than we're showing here. And
3 that's import because the criterion for what you
4 have to do is what you can afford. So if you
5 were to, just as an example, do alternative 4,
6 and you didn't get as good a water quality as
7 you could have gotten with alternative 3, and
8 you could afford to do alternative 3, they're
9 not going to approve alternative 4, because you
10 could afford to do better than this. So that's
11 the whole program. If you can get better water
12 quality by spending more money and you can

13 afford to do it, you have to spend more money.
14 Now they may give a longer period of time to do
15 it if you can show that you can't afford to do
16 it all upfront, you can extend it. But,
17 ultimately, you have to build enough that you
18 can afford to get the best water quality that
19 you can.

20 COMMISSIONER BURROUGHS: Yeah, I
21 hear you, I guess my thought was for a billion
22 dollars I'd see more color change.

23 MR. BRUECKNER: Well, we'll show
24 you as we go along. So, I've got some more
25 slides. We're going to quickly go through

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1 these. You can see the plume, it's moving down
2 for each of these. We'd like in Alternative 3
3 here. There's much better quality water here
4 than here. As we get down here it's about the
5 same. It's a little bit better here than here.
6 So the blues are better than the yellows and the
7 greens. So, that's the common rule of thumb,
8 and you can compare this Phase IV, for example,
9 with phase 2. We do get some improvement, but
10 we do get more improvement with Phase III, and I
11 think the tunnel and alternative 4 are about the
12 same. They're pretty close in this one. A

13 little bit better with the tunnel only. Then,
14 you can see the colors change. Again, you see
15 more dark in 4 and Phase II. Again, Phase III
16 looks better. And, similarly, as we go down
17 this is four days. And by the way, these
18 numbers -- the one thing I wanted to point out
19 was, the assumption was that you met water
20 quality standards at the start of the run, which
21 we don't actually do. So the background loading
22 was zero for the coliforms, which was done so
23 you do could do the comparison without that to
24 see if you did meet quality standards in dry
25 weather what you'd expect to see when you were

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1 addressing the three month storm.

2 COMMISSIONER BURROUGHS: So, our
3 success would be even less because you --

4 MR. BRUECKNER: Unless you control
5 the background sources. Okay, eight days and
6 then ten days. At ten days we basically return
7 to what were the background conditions. This
8 loading here, you see this component here is
9 associated with both the flow from up stream and
10 also the Pawtuxet River has a little bit of a
11 contribution that affects water quality. Again,

12 that's the -- I'll give you this slide because
13 the next one is going to talk about conditional
14 area A and shellfishing. Again, so that's these
15 areas here, we're going to be talking about A
16 and B. So, what do we achieve with the
17 alternatives in terms of meeting standards? And
18 this is done in terms of acre days. Meaning,
19 how many acres are meeting standards over how
20 many days after the three-month storm. So that
21 was a ten day run, so you saw we started having
22 problems at the beginning of the first day and
23 then return to background conditions at the
24 tenth day. So over that period of time, what
25 happened in terms of not meeting standards in

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1 the shellfishing areas, and also in the swimming
2 areas. So those area were areas B. B is the
3 best, that is the furthest down stream. So you
4 can that see even after Phase II we expect to
5 pretty much meet water quality standards for
6 shellfishing all the time with the 3 month
7 storm. Now, if you have a storm that is bigger
8 than the three month storm these numbers aren't
9 going to apply, they're going to be worse
10 because we are designing to control CSOs for the
11 three-month storm. So, theoretically there is

12 no overflow in the three-month storm after we
13 built the facilities. So that's why you get
14 such good results.

15 For area A, which is further
16 upstream, you'll see that we have quite a few
17 acre days where we're not meeting the standards.
18 And, again, looking at the numbers the full
19 Phase III performs the best. Post Phase II the
20 worst. Alternative 4 gives you some improvement
21 over post Phase II and the tunnel only does
22 better than alternative 4. And that also holds
23 true for the swimming, that same analysis.

24 COMMISSIONER BURROUGHS: Now, for
25 the swimming is that 49?

28

1 MR. BRUECKNER: Yes. Now, one of
2 the other things is that incrementally, like
3 tunnel only, also may give you much better
4 results than post Phase II which it does. And
5 then when you add full Phase III that additional
6 increment from just those interceptors upstream
7 is enough to push you over the edge to get
8 better standards or better numbers so you can
9 achieve even more openness in area A. So, it is
10 an incremental thing, because the load from the

11 interceptors is actually very small in relation
12 to the tunnel, but is the improvement associated
13 with bringing the interceptors in is enough to
14 get you down just enough to get a water quality
15 standard compliance.

16 So the conclusions about the water
17 quality improvements are that water quality
18 standards are not met for the design storm for
19 any of the alternatives all the time in that
20 three-month storm. Completed alternatives 2 and
21 3 provide much better water quality results than
22 alternative 4 and, of course, Phase II only.
23 And completed alternative 4 is less effective
24 than the tunnel only under alternatives 2 and 3.

25 COMMISSIONER BURROUGHS: On that

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1 slide the first line the water quality standards
2 are not met for the design storm for any of the
3 alternatives.

4 MR. BRUECKNER: Correct. Meaning,
5 everywhere all the time during that storm.

6 COMMISSIONER BURROUGHS: So, we'd
7 spent a billion dollars but we're still on the
8 hook from more from EPA.

9 MR. BRUECKNER: Well, that storm
10 and that is during a 3-month storm which

11 suggests that there is another source of the
12 problem other than CSOs. Theoretically, in
13 alternative 3, full Phase III, you've eliminated
14 the CSOs. They're contribution is zero. So
15 this is the flows coming into from the
16 tributaries and from storm sewers that are
17 untreated. Again, the wastewater treatment
18 facilities are almost at zero as well.

19 So the other sources besides CSOs
20 eventually will cause you to not meet water
21 quality standards unless they're addressed. And
22 as I mentioned even in dry weather where there
23 is none of that, there are background sources
24 today that prevent you from meeting water
25 quality standards.

30

1 So, the goal is you want to meet
2 water quality standards all the time. There are
3 a lot of factors that are effecting the ability
4 to do that. The biggest one in terms of
5 bacteria which is what we're really talking
6 about for CSOs is CSOs. CSOs are the biggest
7 component, but even if you take that out, you've
8 still got water quality problems that will need
9 to be addressed at some point in the future to

10 meet water quality standards. And that is just
11 for the three-month storm.

12 COMMISSIONER BURROUGHS: You know,
13 what happens if I say, well, the EPA has their
14 integrated planning framework, which at least in
15 theory allows you to go after the low hanging
16 fruit first, and then that would mean the
17 analysis would have to say how many fecal
18 coliforms can we get out of the system if we go
19 to these other sources that we know are still
20 going to keep us in violation even after we
21 spend the billion.

22 MR. BRUECKNER: What this analysis
23 is showing is that the low hanging fruit, not
24 that it is inexpensive really if it's the CSOs
25 because they are the biggest contributors of the

31

1 problem. To control stormwater, that 6 percent
2 of stormwater -- to actually control the
3 stormwater, there has got to be a program
4 similar to what you're doing with CSOs.

5 And, in fact, the stormwater is
6 only 10,000 units. So any treatment you
7 provide, you're not going to get as much
8 reduction as if you treated that same volume of
9 CSO because it just contains a lot more

10 bacteria. So, in terms of integrated planning,
11 still the first thing that we should go after
12 for bacteria is the CSOs based on that loading
13 that you saw earlier, 89 percent.

14 So I would say that -- the other
15 thing about integrated planning which we'll
16 talk about in minute is that besides water
17 quality there is the issue of sewer
18 infrastructure that needs to be addressed. And
19 where does that fall in the integrated planning
20 program, that is a little more fuzzy. Actually,
21 even stormwater is because who is really in
22 control of stormwater? Whose responsibility is
23 it? CSOs are great because it's us. So
24 everybody says, we know, we can deal with them.
25 See, they're responsive. So we're of a victim

32

1 of our success.

2 Okay. So let's talk now about the
3 other big component is affordability. So,
4 you've got water quality standards that you
5 can't meet all the time. There's things that
6 you can do to make things better, but how much
7 you can afford to make things better?

8 So the EPA affordability criteria

9 is really the governing thing in terms of what
10 is affordable for CSO programming. And they
11 came up with these criteria so they have low,
12 midrange and high. And if you have a high
13 impact greater than 2 percent of median
14 household income now we can talk with EPA
15 because we've got a problem.

16 If you are less than high -- well,
17 basically, you can afford to do what ever that
18 dollar amount is because you're below the 2
19 percent median household income. This is a
20 little busy, but this is a baseline NBC capital
21 plan, which is alternative 1. We're dealing
22 with -- when we did this analysis, we used the
23 baseline that was in the currently approved
24 plan.

25 So, that's alternative 1, which is

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1 the tunnel with the interceptors. No green, no
2 stub tunnel. So, the total cost for the CSO
3 Phase III plus all the other things that are
4 typically in our CIP, which are improvements to
5 the interceptor, improvements to the sewer
6 system. You add all of those up and the cost
7 is, I think, the 915 million. So there's other
8 costs on top of the CSOs that we have to account

9 for in our rates going forward.

10 So we're using a number of 915
11 million, and 740 million of that is the
12 alternative 1 CSO cost. So, this is following
13 strictly what EPA procedure is to determine that
14 based on that \$915 million, the cost per
15 household, residential household, is going to be
16 \$790 per year. Going through the methodology
17 that they use for your debt service showing O&M
18 costs and so on.

19 So for the NBC service area, the
20 median household income in 2015 for all
21 communities within the district is \$47,165.00
22 which gives you the \$790 cost per household
23 using that median household income. And the
24 cost per household divided by the median
25 household income, very simple math, you come up

34

1 1.67 percent, which is less than 2 percent.
2 Meaning, it is affordable. Okay. There is more
3 to it by the way, that's the first step.

4 COMMISSIONER ROTELLA: Let me ask
5 my question on step 1 because I'm sure I'll get
6 lost on steps 2, 3, 4 and five.

7 MR. BRUECKNER: No you won't.

8 COMMISSIONER ROTELLA: By step 1,
9 this is the one the debt service, the new debt
10 service?

11 MR. BRUECKNER: Correct. Added on
12 to existing debt service.

13 COMMISSIONER ROTELLA: It
14 completely disregards what you are already
15 paying?

16 MR. BRUECKNER: No, what you are
17 already paying for existing debt service is
18 included in that so --

19 COMMISSIONER ROTELLA: Yes, but
20 what you're paying for NBC cost per year, the
21 rate the average ratepayer pays would be added
22 to that 790?

23 MR. BRUECKNER: No. That 790
24 includes what you're currently paying, plus the
25 CSO programming.

35

1 COMMISSIONER ROTELLA: So that
2 includes our current bill?

3 MR. BRUECKNER: So, you can see
4 right now in this slide the top is current cost,
5 annual O&M, annual capital and debt service
6 subtotal. Then the projected costs are added to
7 that. So the total number of households is

8 118,000.

9 COMMISSIONER ROTELLA: Okay.

10 MR. BRUECKNER: The residential
11 share of the total cost current and projected is
12 93 million cost per household works out to the
13 790. So, that includes what we're currently
14 paying for our rates.

15 COMMISSIONER ANDRADE: These
16 projects stretch out for quite a number of
17 years. How is the future costs and debt service
18 projected?

19 MR. BRUECKNER: Well, we'll get to
20 that.

21 COMMISSIONER BURROUGHS: Where do
22 you add in the cost according to the EPA
23 methodology, the cost for water supply, the cost
24 for Providence's expenses and so on.

25 MR. BRUECKNER: We'll get to that.

36

1 COMMISSIONER BURROUGHS: Okay. And
2 compare that with median household income.

3 MR. BRUECKNER: Yeah, we'll get to
4 that. So, that was actually the EPA -- so,
5 Phase I really was that very simple analysis of
6 affordability based on median household income.

7 Now, in addition, the current EPA methodology
8 allows to you also consider other factors in
9 affordability, and they are your bond rating for
10 the commission. The net debt property value for
11 the communities. Unemployment rates within the
12 state. Median household income which we talked
13 about. Property tax, property value, and
14 property tax collection rates.

15 And there are within these
16 different indicators there is different ranges,
17 and they go strong, mid-range and weak. So you
18 want to be weak in all of these because that
19 helps your case to show that it is not
20 affordable. So this is the financial capability
21 indicators for us, and the higher the number the
22 better -- the stronger you are. So, our bond
23 rating is good. Our net debt percent of
24 property value is good. Our unemployment rate
25 is not so good. So we get a 1 there. Median

37

1 household income compare with the national
2 average. We do better. We're not a 1, we're in
3 the middle, a 2.

4 Property tax revenue, center
5 property value is a 2. Property tax revenue
6 collection rate a 2. So the permittee indicator

7 score for Phase II for us is 2.17. So, now you
8 go to this matrix that gives you the value for
9 Phase I and Phase II, and we are at -- for the
10 residential indicator for Phase I, we're in this
11 column. We're between 1 and 2 percent, and for
12 the -- we're in the mid- range for the other
13 factors, the Phase II. We're 2.17, so it is 1.5
14 to 2.5 for on this.

15 So, with these intersectoral what
16 are burden is, and we're a median burden. We
17 wanted to be over here in the high burden, but
18 the numbers didn't quite work out that way.

19 COMMISSIONER BURROUGHS: What would
20 happen if we added in the Providence Water
21 Supply Board and all the other things to this --

22 MR. BRUECKNER: I was going to get
23 to that. Now, what I want to say is we have now
24 gone through the original EPA affordability
25 criteria that was established in 1998 or so.

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1 Now, stuff that comes after that, I would say is
2 not as well defined. There are some other
3 factors that you can consider, but they're not
4 quite as well-developed as these.

5 These are numbers. You can just

6 say, huh, here is the number. You're over this
7 number, you're in this category. You're under
8 that number, you're in that category. It's
9 pretty straightforward stuff, but before we get
10 to those other factors, I just want to show you
11 for the alternatives where we are.

12 So, at a median household income
13 for the district of \$47,000, we can afford to
14 spend according to the 2 percent factor \$943
15 could be or annual rates for our users. Right
16 here is the 790 dollar rate. And you can see
17 that for alternative 1 we're slightly over. For
18 Alternative 2 we're under. Alternative 3, we're
19 under also until way out at the end of the
20 program when the price goes up, but that is
21 primarily because that program was extended so
22 far out that we pushed off the big expenditures.

23 And, again, this is -- everything
24 is static. Everything is brought back to 2015
25 dollars. So we can compare that way. We're

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1 also -- we have analysis also which has a
2 present value, that is going to be shown in a
3 couple of minutes. These change slightly. And
4 then this was alternative 4 down here. And then
5 this is with no Phase III at all.

6 So, when you look at this, we can
7 afford all the alternatives, according to that 2
8 percent median household income.

9 MR. BURROUGHS: Assuming we don't
10 add in the other factors?

11 MR. BRUECKNER: I'm going to get to
12 that. It's coming. When we get to it, I'm
13 going to tell you we're there, so you know. So,
14 based on that first Phase I and II APA
15 affordability analysis. We can afford the cost
16 per household to do -- now again, that's the
17 baseline. Alternative 2 is actually more than
18 the baseline so the rates are going to be a
19 little bit higher, but because of the way
20 they're spread out, you can see from the
21 previous chart, they're going to be about the
22 same.

23 So, it is 1.67 percent of the
24 median household income, median burden, so it is
25 affordable. The cost per household is greater

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1 than \$943. That is equal to 2 percent of the
2 median household income, it would be
3 unaffordable. And all four alternatives are
4 affordable considering the entire service area,

5 median household income of \$47,000. But as was
6 presented by MWH and is suggested by many of the
7 mayors who are dealing with this issues that
8 that is not the only way to look at
9 affordability because you have communities
10 within the district who are under the \$47,000
11 median household income. So Providence,
12 Pawtucket, Central Falls, for example.

13 So this shows the 2 percent of
14 median household income by community, and you
15 can see that communities like Lincoln are --
16 they are 2 percent. They could afford a sewer
17 rate theoretically according to the EPA of
18 \$1,440, \$1,500. Johnston, \$1,000. East
19 Providence, \$980, but when you look at
20 Pawtucket -- Providence is 751, Pawtucket at 814
21 and Central Falls at 580, that is not so
22 affordable for them. They can't really afford
23 that 2 percent of the district rate.

24 Now, this issue to me is not well
25 defined by EPA. They don't tell you, okay, if

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1 any of your communities is under the 2 percent,
2 you don't have to -- you don't meet the -- you
3 meet the heavy burden. It gets a little gray
4 here once you move away from that 2 percent

5 number and you're now talking about either
6 communities or as MWH has done census track
7 analysis. It is just not quite as cut and dry
8 as to what you can do. Go ahead.

9 COMMISSIONER WORRELL: And my
10 question is right on that point because if you
11 take the East Side of Providence and pull it of
12 below 800, and you stick it up where it ought to
13 be up there around Cumberland or Lincoln which
14 would be appropriate, you're then left with the
15 huge number of the -- I don't know about the
16 household income but the people who are living
17 in those three deckers all throughout
18 Providence, South Providence, West End, Smith
19 Hill, that's a huge number of families, and if
20 you then made an analysis, I suspect, if you
21 made an analysis of the number of the families
22 living the city, living in the area below the
23 red line but on a per capita, if you will, not 6
24 people in a family equals 6, but 6 people in any
25 family or 12 or 2 is 1. If you made that

42

1 analysis my bet is that the numbers below the
2 red line is going to be significantly greater
3 than the number above the red line, and that's

4 the kind of an argument I think we ought to be
5 making to EPA.

6 MR. BRUECKNER: I have a slide for
7 that.

8 COMMISSIONER WORRELL: Because it
9 seems to me that's a much more valid point than
10 the median income. I'm suspicious of any median
11 income.

12 MR. BRUECKNER: Well, what we can
13 do, I mean, I think that's at good point because
14 I think the way the policy is right now is that
15 there are certain criteria which are the Phase I
16 and Phase II which are very well defined. Once
17 you get beyond --

18 MR. UVA: I'm trying, Tom.

19 MR. BRUECKNER: So maybe we won't
20 get to the -- we won't be able to get to the
21 slides for Commissioner Burroughs. What I want
22 to say is that once you get beyond the Phase I
23 and Phase II evaluations it gets a little more
24 gray, but EPA does allow you to make that case
25 for why your program is not affordable.

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1 However, that's done on a case-by-case basis.
2 It is a little more subjective than objective.
3 So we would want to put that into any plan that

4 we have to show that we can afford less than the
5 EPA analysis shows.

6 And, again, what that does for you
7 -- they don't tell you, okay, well, good, you
8 don't have to do anything. Generally, the way
9 they handle that situation is they give you an
10 extended schedule. They say, okay, well, let's
11 just spread it out over a long period of time.
12 So, let me -- where was I? We did that last
13 one.

14 So, now, Commissioner Burroughs,
15 this is where I brought in the integrated
16 planning stuff. And this was the only way I
17 could really think to do it, to show how it
18 effects rates and affordability. So, if we now
19 look at the rates, take the 2 percent median
20 household income for Providence, Pawtucket and
21 Central Falls. I told you what those numbers
22 were before. So Providence it's \$740.
23 Pawtucket it's 800, Central Falls 560, and the
24 weighted average for those three communities is
25 742, which by the way right off the bat is much

44

1 less than the 943 for the whole district.

2 Now, the local costs that you I

3 have got there in the next column would be for
4 sewer maintenance and for stormwater costs that
5 were projected by MWH when they went to local
6 communities to figure out what they would need
7 to spend to bring those up to acceptable
8 standards. I then subtracted those local costs
9 from the median household income because they
10 were part of that 2 percent that they could
11 afford to give me the last column, which is the
12 NBC -- what they could afford to pay NBC after
13 they had paid their local costs to cover the
14 other water quality projects that were required
15 as part of the Clean Water Act.

16 So the numbers that they can
17 actually afford when you take that out of their
18 2 percent median household income, dropped for
19 Providence down to 581, for Pawtucket to 626 and
20 Central Falls to 462, and a weighted average of
21 580, which shows you that the central cities
22 really have a much more difficult ability to pay
23 than the other communities. So that -- go
24 ahead.

25 COMMISSIONER WORRELL: And I will

1 add one more thing to that. If you take
2 Providence and you separate out the East Side,

3 it's going to look a lot more favorable to our
4 position than we would like to be able to
5 advance to EPA. Leave that East Side of
6 Providence of in, and I think it skewers those
7 numbers pretty badly.

8 MR. BRUECKNER: Yeah.

9 COMMISSIONER WORRELL: For example
10 -- and then I'll shut up. For example, I'll bet
11 you that everybody on the East Side files a full
12 and disclosure -- I don't know if it's accurate
13 or not -- but internal revenue report every
14 year. I would bet that that statistic, once you
15 get out of the East Side of Providence down into
16 a lot of the other areas of the real urban part
17 of Providence, there is no data availability for
18 a lot of those people. The only thing that the
19 measure is is what their landlords keep adding
20 every time something happens, and they don't
21 have anything to say about that. So anyway.

22 MR. BRUECKNER: So, the next one is
23 talking about a number of the households with
24 the rates higher than 2 percent median household
25 income from baseline case. This kind of

1 addresses your question about how many

2 households are effected. So this shows it.
3 So for the baseline case this shows
4 the rates and the various years up to 2026 when
5 Alternative I would be done. It shows what the
6 rates are going to be in each of those years,
7 and how many of those households within the
8 district -- and remember, there are 118,000
9 households.

10 So, in 2015, basically before you
11 even start the program, 45,000 households are
12 above the 2 percent. That's 38 percent of the
13 households. As the program progresses and you
14 get to 2026, that number increases to 64,000 and
15 54 percent of the households, which is kind of
16 that census track analysis that MWH has done.
17 That is just kind of taking that and looking at
18 it districtwide as to how many households are
19 going to be severely impacted by those rates?

20 COMMISSIONER WORRELL: How many
21 households are in the average three-decker?

22 MR. BRUECKNER: I'm guessing three.

23 COMMISSIONER WORRELL: Households
24 or one connection, or is that three households?

25 MR. BRUECKNER: Three households.

1 Okay. So, just -- what I think what we're

2 getting at here is despite the fact that EPA
3 uses a service area of meeting household income,
4 there are communities and pockets within the
5 district that are much more affected than --

6 COMMISSIONER BURROUGHS: Do you
7 know if this issue has been litigated?

8 MR. BRUECKNER: I don't think it
9 has. Well, litigated in terms of how. So, if
10 someone submits a report to EPA and says, you
11 know, while our district is greater than -- you
12 know, we can afford 2 percent, we've got a lot
13 of communities that can't. So we're not going
14 to -- we don't want to do that plan, we want to
15 do this plan instead based on this.

16 They may say, okay, we'll give you
17 more time. You've convinced us that you've got
18 some real problems with your poorer communities,
19 and we're not going to make you do the plan in
20 that period of time. We're going to give you
21 more time, but you don't know because you've
22 kind of moved off that 2 percent number. It's
23 not here in the gray area now.

24 MR. MARSHALL: I just want to point
25 out. I mean, like, on a lot of things, we're on

1 the cutting edge of this. There aren't --
2 there have been a lot of organizations that have
3 tried to make this claim to the regulatory
4 people. So I know up an MWRA they were able to
5 get their service -- or their plan extended
6 because of one community. That was Chelsey.

7 So, you know, we have I think some
8 pretty compelling information here, so that we
9 don't need to do our work as it is expected in
10 Alternative I, which is already approved. If we
11 can extend it out a way, then we can make it
12 more affordable for the people that we service.
13 But, it's one of those things we have to do go
14 in and you have to make it your case if you said
15 it's unaffordable for half of the people we
16 don't want to do anything. They wouldn't listen
17 to that argument. But if you say, "This is what
18 we would like to do," and you draw up a logical
19 plan, then it's more likely to well received.

20 And we try to keep DEM and EPA
21 involved in this whole process so they know that
22 this request is coming, and there's going to a
23 lightening bolt for that. You know that this is
24 coming and it's going to be a lightening bolt
25 for them. So, they know that request is coming

1 and what it is going to look like.

2 MR. BRUECKNER: Okay. So, what is
3 an affordable rate for NBC to charge? So I have
4 a range of numbers that we could argue. You
5 could take Central Falls 2 percent median
6 household income minus the local cost. That's
7 the lowest rate, that would be \$462. You could
8 take Providence, Pawtucket, Central Falls
9 weighted average 2 percent of median household
10 income minus the local cost, that's 580. You do
11 Providence, Pawtucket, Central Falls, 2 percent
12 of median household income. No local costs for
13 sewer infrastructure or stormwater. That gives
14 you 742.

15 Or you could take the entire
16 service area with no local cost, you'd be all
17 the way up to 943, which I'd say is the classic
18 EPA criteria of 2 percent. And you can see at
19 the bottom projected NBC rates with Phase III
20 assuming the baseline case. That would be run
21 from 466 all the way up to 812. So, kind of
22 matching the range up above.

23 So, when you look again at the
24 average bills for the four alternatives, you can
25 see on the left-hand side that same range I

1 presented on the previous slide. 469 to 943.

2 At 462 you can't afford to do Phase III at all.

3 At 580, you can do a little bit of Alternative I

4 and 2. You can't even build the tunnel. You

5 get halfway through.

6 For Alternative IV, you couldn't

7 even do Alternative IV, which is the cheapest,

8 but up until 2028, you'd be good for Alternative

9 3, but then cost would start increasing

10 dramatically. And, again, that is the one with

11 the longest schedule. At \$742 you could afford

12 to do the tunnel only for Phase II and

13 Alternative I. And then at \$943 you could do

14 all of them and then some. You could make your

15 tunnel even bigger than for a Phase III storm.

16 So I'm going to turn it over to Karen now.

17 She's got just a few slides to talk about the

18 work done by PFM.

19 MR. MARSHALL: So up until this

20 point, all the analysis that you've seen has

21 been done by MWH following the standard EPA

22 protocol. You might remember that you ask that

23 we have a another look taken at the rates that

24 were being projected using the EPA protocol, and

25 you agree that we would hire PFM, who is our

1 financial advisor to do the rate modelling for
2 us, more along the lines of what we have
3 traditionally done here at the Narragansett Bay
4 Commission to pay for the project. So with
5 that, I let Karen --

6 MS. GIEBINK: As Ray just
7 explained, this is the modelling -- or the
8 results of the modelling that PFM performed in
9 the response to the requests from the board for
10 some additional financial analysis, and their
11 model is more consistent with the way that we
12 actually prepare our rate projections. And what
13 they did was they took a look at present values
14 of the capital and O&M costs associated with the
15 CSO program. I know that was a concern to some
16 of the commissioners as well given the fact and
17 it would be extending the time frame possibly of
18 the capital improvement. So taking a look at
19 what the impact of that might be.

20 And, also, taking a look at -- one
21 of the results of the model is the cumulative
22 rate impacts from the different scenarios. So,
23 some of the differences between the PFM
24 assessment and the model prepared by MWH are
25 that PFM's model began in 2016 because we

1 already had rates and the debt service
2 associated with those rates built into the
3 model.

4 One of the biggest differences is
5 that the PFM model actually inflates the capital
6 cost, which is significant. You'll see that
7 when the rate projections are shown. Debt
8 service reserves are funded through bond
9 proceeds, where MWH's model funded the debt
10 service reserves through cash.

11 There is no O&M reserve fund built
12 in the PFM model, which is consistent with the
13 way that we currently fund. MWH has included a
14 90-day O&M reserve. One other difference is
15 that the prior year's surplus revenues are not
16 used until the year after they're generated in
17 the PFM model, and in the MWH model, they're
18 used in the same year that they're generated.

19 And, lastly, there's level debt in
20 the PFM model, and MWH did some deferral of
21 principles. There are a few over nuances, but
22 I'll start with that. In terms of a comparison
23 on a present value basis, you can see that the
24 cost was discounted at 3 percent and that also
25 included the incremental O&M cost. And based

1 upon the present value of all the debt service
2 payments used to fund the capital improvements,
3 you can see that Alternative I is the least cost
4 at 711 million. Alternative II at 737 and
5 Alternative III is 818 million.

6 And in terms of impacts on rates,
7 this chart is a little busy, I know, but the
8 dash lines represent the rate increases
9 projected as a result of the MWH model, and the
10 solid lines are the PFM results, and you can see
11 that just due to modelling differences and the
12 structure of the debt that there are different
13 results. And, also, one of the other biggest
14 drivers is the inflation assumption. And you
15 can see the blue lines are -- that's associated
16 with the third alternative, and you can see that
17 although rates are lower, initially, they
18 definitely spike up significantly. And the
19 result of PFM because of the inflation results
20 in a cumulative rate increase of 182.6 percent.

21 COMMISSIONER BURROUGHS: I'm still
22 struggling with the previous slide in which you
23 indicated total cost of 711, 737 and 818. Yet,
24 on page 8 of their handout from the last
25 meeting, we've got total cost of 1.2 billion,

1 1.3 billion and 1.7 billion. So somehow they're
2 different assumptions.

3 MS. GIEBINK: What table are you
4 looking at?

5 MR. MARSHALL: He was looking at
6 the presentation that was given a month or so
7 ago.

8 MS. GIEBINK: Those would be total
9 costs of the capital expenditures. This
10 represents the debt service associated with
11 financing.

12 COMMISSIONER BURROUGHS: So, if I
13 want to understand the total cost of the
14 project, it is the capital expenditures plus the
15 debt service?

16 MS. GIEBINK: You're not going to
17 pay both, you're going to pay one or the other.

18 COMMISSIONER BURROUGHS: I'll talk
19 to you after.

20 MS. GIEBINK: Okay, but this will
21 represent, like, the value of those payments
22 year over year what you'll be paying out over
23 the life of financing the project and present
24 values.

1 it to the present.

2 MS. GIEBINK: So, based upon the
3 results of the PFM assessment, Alternative II
4 has the lowest cumulative revenue increase or
5 rate increase. It is interesting to note,
6 however, when it reaches its peak in terms of
7 the max rate increase, it's sooner than under
8 Alternative III. And this is the result of the
9 model of Alternative II, the overall projected
10 rates in year 2015 through 2040. And you can
11 see the projected rate in 2040 is \$757. So,
12 it's slightly different results than what you
13 saw with the MWH model, but not hugely
14 different.

15 COMMISSIONER WORRELL: Karen, the
16 question was this: I thought I heard you say
17 that the MWH model did not include any
18 amortization of principle and PFM did include
19 amortization of principle?

20 MS. GIEBINK: It appeared that when
21 we were digging down into the back of the MWH
22 model, it appeared that they did some wrapping
23 of the principle. So, as opposed to a level
24 debt structure so that some of the principle was

25 deferred until the later years.

56

1 COMMISSIONER WORRELL: And then
2 discounted so it doesn't impact. Is it like a
3 balloon payment?

4 MS. GIEBINK: Well, it's typically
5 -- like, for example, right now even with our
6 Clean Water loans, they've typically been
7 20-year loans. So we will wrap some of our own
8 open market debt at 30 years, and we'll layer it
9 so that the principle payments are, I guess,
10 sort of ballooned at the end so you end up with
11 all the level debt structure. But they just
12 structured their debt differently, that's all.

13 COMMISSIONER WORRELL: In your
14 opinion, both of them are reasonable approaches?

15 MS. GIEBINK: Yes. This chart here
16 is the comparison of the 2014 survey results for
17 Rhode Island compared to annual residential user
18 charges based upon 150 gallons per day. You can
19 see right now NBC's rates are below the average.
20 Average being around \$481. NBC's current rates
21 are around \$459.

22 And several of these other
23 providers are also facing significant capital

24 improvement programs. And this takes a look at
25 NBC's charges versus some other major U.S.

57

1 cities. They use a slightly higher assumptions
2 for the calculation of the annual charge. They
3 use 128 HDF, which is, I think, higher than what
4 most utilities actually use or have seen. NBC's
5 rates on an annual basis, you can see they're
6 right in the middle there at \$618 per year.

7 MR. MARSHALL: So those are
8 basically our current rates compared to
9 everybody else. So while our rates will
10 certainly go up with Phase III, so will a lot of
11 those other communities, and a lot of those
12 other large organizations throughout the country
13 as they do all of their programs. So relatively
14 speaking we're in pretty good shape, and you'd
15 expect almost a match as we all climb up that
16 ladder. Our relative position, we think, will
17 stay relatively the same.

18 CHAIRMAN MESOLELLA: Can you go
19 back one slide?

20 MR. BRUECKNER: Go back to the
21 previous one? The next one?

22 CHAIRMAN MESOLELLA: At what point
23 out in our project we're hitting 749, right? Is

24 that the conclusion? The 790?

25 MR. BRUECKNER: The 790 is the cost

58

1 per household?

2 CHAIRMAN MESOLELLA: And that would

3 be at the conclusion of --

4 MR. BRUECKNER: Pretty much at the

5 end of the project.

6 CHAIRMAN MESOLELLA: So the end of

7 the project where it is 790, and even after

8 investing \$900 million dollars we're still

9 below, at least the highest today, and they

10 haven't done any the requisite capital

11 improvements that they're going to need some

12 time in the future. All right. Got it. Got

13 it. Even at the end of spending all the money

14 we're going to spend we're still not at the top

15 of the list. And these other communities, many

16 of them, have capital improvements that they'll

17 need to make. And all their rates are going up.

18 Newport has a big capital

19 improvement program, they're going to embark on

20 as well; right? So Newport, Middletown,

21 Cranston, Warwick, Woonsocket.

22 MR. MARSHALL: East Providence's

23 rates are going up a little, I think.

24 COMMISSIONER ANDRADE: Don't say

25 that.

59

1 COMMISSIONER HANDY: Rates have to

2 do with the total cost of your operation, but

3 they also have to do with the number of rate

4 payers; right?

5 MR. BRUECKNER: Right.

6 COMMISSIONER HANDY: Because you're

7 dividing the total cost by a number rate payers.

8 Is that a little misleading because Newport has

9 a much smaller rate base than we do?

10 MR. MARSHALL: I suppose it could.

11 The other thing you have to factor in is that on

12 the end of the spectrum is that some of these

13 people do not include debt service in their

14 rates, and we do. This is covered by assessment

15 and Ad Valorum tax.

16 COMMISSIONER ROTELLA: Again, just

17 a little bit of the understanding. NBC service

18 area of 459. This picks up in Woonsocket, 401.

19 Now that NBC 459 is after Phase I and after

20 Phase II; right?

21 MR. BRUECKNER: It's our current

22 bill today.

23 COMMISSIONER ROTELLA: So we have a
24 certain level that we're at after Phase I and
25 Phase II?

60

1 MR. BRUECKNER: Well, I think that
2 there's still some -- I don't, Karen, if there
3 are some rate increases associated with Phase I
4 and Phase II that are --

5 MR. MARSHALL: I'm not sure. Not
6 1, but 2.

7 MS. GIEBINK: Yeah, for the most
8 part the rates have increased to cover Phase I
9 and Phase II. We have a rate case that we just
10 filed for 2.37 percent and that should take care
11 of the rest of --

12 MR. MARSHALL: So, what does that
13 amount to? About \$20.

14 COMMISSIONER ROTELLA: Whatever it
15 is.

16 CHAIRMAN MESOLELLA: Karen, is that
17 all CSO?

18 MS. GIEBINK: No.

19 CHAIRMAN MESOLELLA: No, the
20 question you just answered about rate increase.

21 MS. GIEBINK: Right. That's just a

22 small portion of that is what's remaining.

23 COMMISSIONER ROTELLA: Some of it's
24 operation maintenance.

25 MS. GIEBINK: It's all debt service

61

1 associated with capital projects.

2 CHAIRMAN MESOLELLA: Capital
3 projects. It's important to make that
4 distinction.

5 MS. GIEBINK: The majority is some
6 of Phase II and a little bit of Phase III.

7 COMMISSIONER ROTELLA: What I'm
8 trying to figure out is that when you look at
9 the towns below us or the citizens below us, and
10 that's the Woonsocket. It could be
11 Narragansett, but let's talk about Woonsocket
12 for a second. Did they have the same level that
13 we have in terms of -- in other words, we're
14 after now 1 and 2. Are they there?

15 MR. BRUECKNER: They don't have
16 combined sewers, first of all. They have no
17 BNR, no CSOs. I'm not sure where they are with
18 BNR. I don't know, do you know, Ray, if they
19 put in DNR yet there, in Woonsocket?

20 MR. MARSHALL: Woonsocket hasn't
21 done anything else there.

22 COMMISSIONER ROTELLA: What I'm
23 trying to figure out is, are we comparing apples
24 to apples there?

25 MR. BRUECKNER: No.

62

1 COMMISSIONER ROTELLA: That's what
2 I want to know. I'm here to pick on Woonsocket,
3 it could be anybody.

4 MR. MARSHALL: Some of those other
5 communities have very big expenditures they're
6 going to be facing, they just haven't faced them
7 yet.

8 COMMISSIONER ROTELLA: That's what
9 I'm saying. So, they're really going to push
10 over us now.

11 COMMISSIONER WORRELL: Right, and
12 that's the point I'm trying to make.

13 MR. MARSHALL: By the way, it's \$9
14 and not \$20, sorry.

15 MR. BRUECKNER: Okay. We're almost
16 done. So the next steps are the Board selects
17 the alternative, either an April or May meeting.
18 Then we complete the reevaluation report, MWH
19 competes that in June. We submit it to DEM for
20 review for review. We're assuming they spend

21 till November reviewing it with EPA. Then we
22 negotiate the revisions to the consent agreement
23 and the schedule based on the report. Say, that
24 takes us to the end of this year, and then we
25 sign the revised consent agreement, say, in

63

1 January.

2 And then we -- Phase III is
3 schedule for implementation assuming that we're
4 going to go ahead with the alternatives
5 presented, continuing on without interruption.
6 We do preliminary design from January 2016 to
7 June of 2017. And then there is another DEM
8 review about six months. The final design would
9 then take place after EPA approves preliminary
10 design, another 18 months.

11 RIDEM review of that. At the end
12 of December they finish their review of the
13 final design. We award the bid in June of 2020,
14 and then start construction of whatever
15 alternative it is. The first phase, say, five
16 years for the first phase, five or six years.
17 Okay, and then --

18 COMMISSIONER BURROUGHS: Okay.
19 Could you just say a word about the status of
20 the re-evaluation report and whether we could

21 have access to it.

22 MR. BRUECKNER: It is a draft

23 report right now. I think there are some

24 changes we'd like to make before it goes out.

25 There are some numbers that need to be fixed.

64

1 So I would hope that within a month or so we

2 could have something that would be able to go

3 out.

4 MR. WORRELL: To the Board?

5 MR. BRUECKNER: Right. I'm done,

6 but the next set of slides are Rays.

7 MR. MARSHALL: There's only a

8 couple of -- at one point during the process the

9 Board asked that if we could do some type of an

10 economic impact analysis. So we hired the firm

11 4ward Planning who has done work for the Rhode

12 Island Convention Center Authority. I believe

13 the Commissioner Bennett recommended them as

14 well as the Rhode Island Port Authority. And,

15 so, that's just the first page. Go ahead, go to

16 the next one. The bottom line is we have copies

17 of all of that for the commissioners. If they

18 want a copy see Karen.

19 The bottom line here is that

20 depending on the alternative that you pick,
21 about the fourth line over you see unemployment
22 -- I mean, employment. Excuse me, employment,
23 improving unemployment -- is about how many jobs
24 would be created by the different alternatives.
25 They're all within a couple of 100 of each

65

1 other, though, 1 through 3.

2 And, then, if you look a little
3 further to the right, you'll see the state and
4 local taxes and millions of dollars both current
5 dollars and then inflation adjusted dollars.
6 So, that's what it will generate in terms of
7 increased taxes and sales tax on some of the
8 material that is used on the job.

9 By the way, just for your
10 information, anything that we include in the
11 permanent part of our job is not subject to
12 state taxes if they have rentals and things of
13 that issue. If they buy a new truck or if they
14 buy a new shovel. There is a sales tax on that.
15 And then the last one, you can look through the
16 handout at your leisure.

17 I'll just go to the last one. And
18 they figure that there's a certain amount of
19 direct impacts some indirect impacts and some

20 induced impacts for the total effects, and the
21 total effects are what you just saw. And those
22 are the definitions of what those different
23 components mean. I won't bother going through
24 them for you, but it shows you how there is a
25 multiplier of that effect. So, we also

66

1 completed that as you requested.
2 And that sort of puts us at the
3 point where we are interested in knowing if
4 there is anything else that you want to know.
5 Anything else that you need to see. Do you have
6 any particular inclinations one way or the
7 other? There is an item before the, first the
8 Long Range Planning Committee tomorrow, and then
9 the full Board if you are ready to make a
10 decision which outlines, you know, a two-page
11 memo. More or less everything that you see
12 tonight and in the past and then there is also,
13 there are three different resolutions, and you
14 would pick one of the three, whichever one --
15 whichever alternative, you know, you prefer. So
16 it would be 2015 09-1 or -2 or 03. Move
17 whichever one you were partial toward, and then
18 we can take it from there.

19 COMMISSIONER ANDRADE: Will we be
20 getting our recommendation from management?

21 MR. MARSHALL: If you're look for
22 one, yes, so the Chairman asked me the same
23 question. So, we didn't want to roll this out
24 to you until you had heard everything so that we
25 didn't -- you pointed in any particular

67

1 direction. But I think the best combination of
2 water quality improvement, affordability, and a
3 reasonable construction schedule is Alternative
4 II. I believe that's what staff feels. It's
5 the best way to go.

6 COMMISSIONER WORRELL: I had a
7 question for Ray. Assuming that we took some of
8 those census figures that we had seen there and
9 the -- working towards, I'm talking now about
10 the less than 2 percent and more than 2 percent
11 median household income, and let's assume that
12 we were able to prevail on EPA and say to them,
13 "Look, we like version 2, but we can't afford it
14 based on this argument that he we would make,"
15 are you prepared to say, "Okay, assuming EPA
16 gives us a 15 percent reduction in their demand
17 as to what we have to do, have we identified
18 within Phase II how we might take advantage of

19 that 15 percent reduction in EPA's mandate?

20 MR. MARSHALL: I'm not sure that
21 they would allow us to do 15 percent less than
22 what we're already required to do.

23 COMMISSIONER WORRELL: It could be
24 1 percent.

25 MR. MARSHALL: Right. I think what

68

1 they are inclined to do is to give us more time,
2 you know, until to complete the entire Phase
3 III.

4 COMMISSIONER WORRELL: Okay. And
5 that would be the way we would approach them.

6 MR. MARSHALL: And you certainly
7 get the biggest bang for your buck no matter if
8 you're talking about CSO or stormwater or the
9 lateral sewer improvements, you know, by doing
10 the tunnel. Tom showed you the numbers. It's
11 like -- is it the 89 percent, Tom?

12 MR. BRUECKNER: For the CSO, right.

13 MR. MARSHALL: I mean, if you knew
14 everything you needed to know about stormwater,
15 all the projects, what needed to be done, where
16 the pollution, you know, was coming in from
17 stormwater and you knew what problems you had in

18 your lateral sewer system, and if you just look
19 at water quality, I think it would be hard to
20 make an argument other than spending it on the
21 tunnel gets you the biggest water quality
22 improvement.

23 And then how fast you do the rest
24 of Phase II is what we, you know, have presented
25 and what we would negotiate, you know, with the

69

1 regulatory agency. So, rather than do all of
2 Phase III in the next 10 years, we have up to
3 2038.

4 MR. BRUECKNER: Right.

5 COMMISSIONER BURROUGHS: I think we
6 have to have, to caveat what you just said in
7 terms of the context of what kind of water
8 quality change would we, in fact, get. And, if
9 we look at the time to being in compliance at
10 Conimicut Point by spending a billion dollars,
11 you'd get their five days quicker.

12 So the -- if you look at the data
13 that has been presented, your argument holds,
14 but the total amount of improvement we get is
15 small in comparison with the amount of the money
16 that we're spending. And that's not
17 engineering. It's basically EPA is saying, You

18 need to go up where the curve gets vertical in
19 terms of cost per unit of pollution removed, you
20 need to climb that quick. And I think that's
21 where we're facing some issues.

22 CHAIRMAN MESOLLELA: Yeah, but Doc,
23 let me ask you a question. What is your
24 solution? I'd like to hear it.

25 COMMISSIONER BURROUGHS: Oh, first

70

1 of all, Boston has 1,000 fecal coliform per
2 milliliter water quality. It's called Class C
3 Waters. These people will know the details of
4 it. If we said, "Now, wait a minute, we could
5 be overspending a lot. Why don't we just go for
6 1,000 like they do up in Boston in this critical
7 stretch of the estuary and then do our cost.

8 My guess is, you know, we would,
9 you know, save a lot of money. And, still,
10 we're kind of apart from EPA in the sense as,
11 you know, the lawyer from EPA wants to swim off
12 of any dock in the harbor. So he wants 14, but
13 in other states and other circumstances they
14 give you 1,000. So, if because we set our use
15 attainability we can change it. Now,
16 politically, you're going to tell me impossible.

17 CHAIRMAN MESOLELLA: I never say
18 impossible. What I say is it's time-consuming,
19 and we're under certain time constraints. So
20 that my point.

21 COMMISSIONER BURROUGHS: So one
22 solution is to say we need to be realistic about
23 what our goals are and then maybe we don't put
24 54 percent of our households in the red,
25 according to what we saw this evening. So, I'm

71

1 not saying, you know, don't do anything. I
2 think we need to be more realistic, and that's
3 not our fault, that's EPA's fault, I think.

4 COMMISSIONER HANDY: I'm very
5 concerned about the impact on ratepayers and the
6 impact of what we've done so far on ratepayers,
7 and the fact that we are dealing with a
8 stormwater problem that isn't being adequately
9 dealt with by the municipalities but, you know,
10 one of our main goals is water quality,
11 actually.

12 So I'm thinking about it from a
13 water quality perspective right now. And I'm
14 thinking about, first of all, there -- our
15 operating budget is kind of a moving target. We
16 could do things with our operating budget that

17 could change our economics pretty substantially.
18 For instance, energy as an example. There's a
19 possibility that we could save a lot on our
20 energy conceivably.

21 That changes the numbers quite
22 dramatically. It might give us more flexibility
23 in terms of water quality. I'm also thinking
24 about -- I'm not sure what was the other thing I
25 was thinking about. But there are operating

72

1 impacts that, I think, we need to -- I don't
2 know where we account for those basically, but
3 I'm sure I'll think of the other thing I was
4 thinking of. What does that -- what does that
5 do for the analysis?

6 MR. MARSHALL: Yeah, we've been
7 trying to find ways to reduce our operating
8 costs over the last year the wind turbines are a
9 good example. Right now we're at \$1.1 million a
10 year, and then even smaller things changing the
11 -- you know, the way we provide healthcare here
12 saving 6 or \$700,000 a year. Those things
13 typically all help trying to gain new customers.
14 We just gained Resource Recovery adding probably
15 \$450,000 in additional revenue. So, we are

16 trying to take those opportunities when they're
17 available. But there's no doubt that the
18 capital costs, you know, is a big driver of our
19 rates and has been for quite a while.

20 The problem is, is that this whole
21 process is a balancing act between affordability
22 and water quality improvement. We have to make
23 our case with the regulatory people to show that
24 we're striking a balance in between those two.

25 COMMISSIONER HANDY: There are two

73

1 other things that I wanted to say. One is that
2 we have this new proposal from the Governor to
3 do an infrastructure bank. It involves
4 investments and stormwater on the private side,
5 and that's something that we could consider in
6 term of the impact on water quality. The
7 potential, you know, that ramped up investment
8 on the private side could have an impact on
9 water quality.

10 The other is that, I guess -- and
11 we talked about this before. There's also a
12 question of prioritization in terms of where we
13 make our investments, and this is one area that
14 obviously could be a priority, but, you know,
15 we, with the climate change. We've talked about

16 this in the past. We could be at great risk of
17 losing facilities and the impact on water
18 quality of a catastrophic storm could be much
19 more dramatic than this conceivably. Is there
20 an investment that needs to be made to prevent
21 that from happening?

22 So, how do you consider all of the
23 -- if you're thinking about it from a water
24 quality perspective, how do you consider all the
25 factors that are on the table, including the

74

1 ability to reduce our operating budget and the
2 potential that will have a major impact from
3 another angle that we're not even considering?

4 MR. MARSHALL: Yeah, those are all
5 very challenging issues, you know, that we do
6 have to deal with as we move forward. It would
7 be nice if we had the all the information
8 available right now to start making of all those
9 assessments. The thing is that we are in under
10 a consent agreement right now, and I don't know
11 if the clock is officially starting to tick, but
12 it's probably about ready to start ticking.
13 Under the consent agreement we signed years ago,
14 we need to have preliminary design plans in for

15 the currently approved Phase III within one year
16 of completion of Phase II.

17 COMMISSIONER HANDY: I would think
18 that the EPA would understand that they are much
19 more aware that this isn't a static situation,
20 too. I mean, in terms of the fact that they're
21 probably much more aware of the risks of this
22 now than they were when you entered the
23 agreement. So, the question is whether they
24 would, you know, be willing to entertain the
25 idea of prioritizing.

75

1 MR. MARSHALL: My discussions with
2 them seem to have indicated that we need to make
3 a case for what we're responsible for and then
4 they'll go after the others, you know, for those
5 responsibilities that they have.

6 COMMISSIONER HANDY: Well, who's
7 responsible for protecting our facilities
8 against catastrophic hurricane?

9 MR. MARSHALL: Right, and, again,
10 when we get into an analysis, that's going to
11 come down to what type of hurricane are you
12 going to try to protect yourself against? I
13 mean, if it's -- if you're talking about a
14 15-foot surge of water coming up the bay, it's

15 going to cost one amount of money. If you're
16 talking about a 30 foot surge of water coming up
17 the bay, then we'll probably not be able to --

18 COMMISSIONER BURROUGHS: We're
19 modelling that at the university now, and we're
20 taking the assumption of Hurricane Carol. This
21 is one that we know, and that turns out to be
22 the -- you know, the system in Providence was
23 designed to contain it. So, if we were to have
24 another Hurricane Carol, we probably look at the
25 surge around 20 feet.

76

1 COMMISSIONER HANDY: And you're
2 saying that our current design is able to
3 sustain that?

4 COMMISSIONER BURROUGHS: No, not
5 for what's south of the hurricane barrier.
6 South of the hurricane barrier, all this kind of
7 mayhem you're talking about will occur. But, if
8 the hurricane barrier itself were to be breached
9 then that would be Downtown Providence, it would
10 be a whole other level. So, at least in terms
11 of thinking about how you model it, it's up to
12 Hurricane Carol size and the effects of that on
13 the land area south of the hurricane barrier is

14 what we're looking at.

15 CHAIRMAN MESOLELLA: Are we
16 finished with the screen?

17 MR. BRUECKNER: Yeah.

18 CHAIRMAN MESOLELLA: Earlier, I was
19 warned that this is a -- what's the word --

20 MS. HORRIDGE: Workshop.

21 CHAIRMAN MESOLELLA: Workshop, and
22 consistent with that, I wanted to make
23 absolutely certain that we don't run astray of
24 the open meetings law and it doesn't become a
25 board meeting. So, I want to make sure that

77

1 we're actually careful about, you know, how we
2 proceed.

3 But, you know, having said that,
4 does anybody have any thoughts they want to
5 express because on -- tomorrow we're going to
6 have three resolutions prepared. There will be
7 a subcommittee meeting of long-range planning,
8 which -- if I go to the procedure for tomorrow
9 night, am I okay for tomorrow night?

10 MS. HORRIDGE: That's fine.

11 CHAIRMAN MESOLELLA: So, I mean, so
12 it basically refers -- you know, the
13 presentation you've heard the recommendation or

14 what it will be, I suppose, a recommendation of
15 staff if they ask for a recommendation. How --
16 what are the thoughts? Anybody have any
17 thoughts on what we've heard today? Am I okay
18 asking that question?

19 MS. HORRIDGE: It's a discussion.

20 CHAIRMAN MESOLELLA: All right.

21 Because it's not too late, you know, the press
22 cranked up in the headline tomorrow morning, you
23 know. Any thoughts anybody?

24 COMMISSIONER BURROUGHS: I remain
25 deeply concerned that the improvement in water

78

1 quality is not enough to justify the cost. So,
2 for water quality focused, I think we're not
3 getting a billion dollars here. And as I said
4 earlier, that has to do with the fact that we're
5 on a vertical part of the curve.

6 CHAIRMAN MESOLELLA: We all heard
7 you. I think everybody understands your
8 position on that.

9 COMMISSIONER FARNUM: I'm really
10 impressed with how much work from the staff has
11 gone into educating us. And, for me, it has
12 been very helpful. And it seems clear to me

13 that we have to do something, we can't do
14 nothing.

15 CHAIRMAN MESOLELLA: Right.

16 COMMISSIONER FARNUM: So, I hope
17 that we will vote tomorrow and go head, and my
18 preference is two.

19 MR. MARSHALL: Well, thank you very
20 much.

21 COMMISSIONER ROTELLA: I certainly
22 agree with Dr. Burroughs. When he says that
23 what we're about to spend or possibly could
24 spend is probably too much for what we're going
25 to get, and I think that's what you said. I've

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1 heard Ray for years now saying to go from where
2 we were to five parts per million it's going to
3 be --

4 CHAIRMAN MESOLELLA: Three.

5 COMMISSIONER ROTELLA: Some many
6 billion dollars, close to a billion dollars, get
7 from five to three, and it's going to be the
8 same amount. And we always have questioned the,
9 not only the affordability but the sensibility,
10 if you will, of spending all this money for such
11 a small increase.

12 I'm not sure -- I have dealt with

13 regulators in the past and I deal with everyday,
14 they're not the most sensible people. They
15 sometimes have -- "This is what it says," and
16 "This is what it is going to be. I don't care
17 what it costs. I don't care what it costs, I
18 don't care what it means. This is what it says,
19 that's what it's going to be.

20 I just don't know what flexibility
21 we have in negotiating with them, or has that
22 flexibility time past already is it still in
23 existence. As Commissioner Farnum says, "We may
24 have to do something." What it is, I don't know
25 yet, but, I think we need to come up with

80

1 somewhat of a again, the word sensible means so
2 many things to so many people.

3 I had a -- this is a quick story.
4 I'm in the nursing home business. And we cited
5 last month because our kids and staff wore hats,
6 but they didn't cover enough of their hair.
7 Now, when I talked to the guy from the
8 Department of Health, he said to me, "Just be
9 sensible." "I thought I was being sensible.
10 They're wearing hats." I mean, how do you make
11 sense out of this?

12 I mean, you know, your idea of
13 sensible and mine are based upon the products
14 may be different, if you will, as to what
15 sensible -- I'd have to probably agree with you
16 that we're going to spend a lot of money with
17 not a lot of increase and not a lot of benefit,
18 if you will. And I just don't know how much
19 we're going to be forced to do that.

20 And I want to spend the least
21 amount of money to get the most amount of
22 benefit, but if that's going to be attainable in
23 a governmental scenario asks that question.
24 It's because in government, most of the time
25 sensibility means nothing.

81

1 COMMISSIONER BURROUGHS: Well, I
2 think the data this evening shows that 54
3 percent limit of the households will be over the
4 2 percent --

5 COMMISSIONER ROTELLA: I agree.
6 And it's probably going to be as Commissioner
7 Worrell said, it's probably going to be more
8 than that if he counted it in a different way.
9 But, you know, is that going to carry the day or
10 not? That is going to be the real question.
11 And, how do we carry the day?

12 CHAIRMAN MESOLELLA: So, Laurie,
13 how are we doing here?

14 MS. HORRIDGE: Fine.

15 CHAIRMAN MESOLELLA: You just jump
16 up.

17 MS. HORRIDGE: I will.

18 COMMISSIONER ANDRADE: They would
19 just stretch it out and say you still need to do
20 what you need to do. So they would just stretch
21 it out, possibly, if they were a little
22 reasonable. And remember now --

23 MR. MARSHALL: I just want to point
24 out one thing, you know, before I lose this
25 thought. We already have signed on the dotted

82

1 line for a plan; right? So we're already on the
2 hook to meet that plan. This isn't we're at
3 ground zero, and let's build something. This is
4 what we're going to do unless we can convince
5 the regulators that there's something better.
6 And if they don't like it, they can simply say
7 no. Do what you already signed on for. I just
8 want to make that point.

9 CHAIRMAN MESOLELLA: All right.

10 COMMISSIONER CARLINO: And when I

11 look at the timeline, if I remember the
12 timeline. All the points that everyone's made,
13 I mean, those are valid points about climate
14 control. You know, what if this happens? What
15 if that happens? But like the Executive
16 Director said, we've signed on the dotted line.
17 We have to do something. And my simple mind
18 says when you look at that schedule, we have to
19 make a decision, we have to do something, and
20 then there are other things that we have to do
21 like, present to them. Present to them our
22 study, everything that the staff has done.

23 And at that point, we can push back
24 on them and say, "Gee, we're spending all these
25 dollars, like Dr. Burroughs is saying, and we're

83

1 getting this amount of benefit," and see what
2 their reaction is because maybe that might
3 spread it over a longer period of time, or maybe
4 we may spend less dollars.

5 By us making the decision on what
6 we want, it's not the end. I think there's
7 going to be further meetings with EPA. We're
8 going to find out more. And we know the staff
9 has always pushed back when there's certain
10 regulations that says, you know, "You have to

11 meet this water quality." We might say, "Gee,
12 there's no way we're ever going to meet that
13 water quality. So, I think we have to take a
14 step at a time, and I think the next critical
15 step to make that decision.

16 CHAIRMAN MESOLELLA: Again, I just
17 wanted to -- excuse me, but as I recall
18 correctly, and I thought we talked about option
19 2 giving us the best option tool to spread that
20 cost out because we had that. When we refer to
21 it as an adit, the second tunnel.

22 You get the biggest bang for the
23 buck for the main tunnel, right, and then you
24 can do all the green infrastructure programs.
25 And then at some point, we could actually

84

1 stretch out the adit piece, right, which is the
2 labor cost, and that would put us under the 54,
3 or get closer to 2 percent affordability; right.

4 MR. MARSHALL: It would be better,
5 yes. You know, in terms of affordability, I
6 understand. I mean, you look at 54 percent of
7 the households being over by the time we're
8 done, you say, Wow, that's a lot of households.
9 But there is no metric that says, "if it's one

10 household or every household has to be over,
11 which would be your entire service district. So
12 that's where all the negotiation takes place.
13 That's where all the other convincing, you know,
14 has to occur.

15 COMMISSIONER HANDY: I have another
16 concern, and that is that if the remedy really
17 -- if we show that there's a burden, if the
18 remedy is stretching the the project out, it
19 looks like the projects that are stretched out
20 end up costing us a lot, lot more.

21 COMMISSIONER WORRELL: That's
22 what's known as taking a can down the road.
23 We're good at that around here.

24 COMMISSIONER HANDY: That may not
25 be good for the ratepayers anyway in the long

85

1 run.

2 MR. MARSHALL: That's the reason
3 why when Karen showed you her slides showed that
4 Alternative II seemed to tumble out the best,
5 all things considered.

6 CHAIRMAN MESOLELLA: Commissioner
7 Montanari.

8 COMMISSIONER MONTANARI: I thought
9 this workshop was to review all of these things

10 and anything else that we were supposed to have,
11 and I thought tomorrow we, the three proposals
12 would be presented and we would like to vote on
13 it. There are three proposals presented to us,
14 and we vote on one of the proposals. That's if
15 the vote gets it, the vote gets it. That's all
16 I'm saying. I mean, what are we wasting our
17 time for on workshops and everything else on
18 other discussions?

19 CHAIRMAN MESOLELLA: That's the
20 plan.

21 COMMISSIONER MONTANARI: Maybe I'm
22 saying the wrong thing. As far as I'm concerned
23 the workshop is over.

24 CHAIRMAN MESOLELLA: I make a
25 motion to adjourn. So, I mean, unless anybody

86

1 has any questions, or anything? A concern they
2 want to voice or an opinion they want to
3 express, we're done here today, and the time,
4 Chairman, tomorrow morning.

5 COMMISSIONER CARLINO: 9:30 sharp.

6 (HEARING CONCLUDED AT 9:00 P.M.)

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1 C-E-R-T-I-F-I-C-A-T-E

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3 I, PAULA J. CAMPAGNA, CSR, a Notary
4 Public, do hereby certify that the foregoing is
5 a true, accurate, and complete transcript of my
6 notes taken at the above-entitled hearing.

5

6 IN WITNESS WHEREOF, I hereunto set my
7 hand this 2nd day of June, 2015.

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PAULA J. CAMPAGNA, CSR, NOTARY PUBLIC/CERTIFIED
COURT REPORTER

MY COMMISSION EXPIRES: April 25, 2018

IN RE: Board of Commissioners Meeting

DATE: April 27, 2015