In The Matter Of:

Narragansett Bay Commission

CSO Phase III Stakeholders Group
March 12, 2014

Min-U-Script® with Word Index

AGENDA: CSO PHASE III STAKEHOLDERS GROUP

NARRAGANSETT BAY COMMISSION

DATE: March 12, 2014
TIME: 1:00 P.M.
PLACE: Narragansett Bay Commission
       Corporate Office Building
       One Service Road
       Providence, RI 02905

PRESENTERS:

MIKE DOMENICA
RAY MARSHALL
TOM BRUECKNER
RICHARD RAICHE
GREG BARD

PANEL:

AMES COLT
LANCE HILL
STEVE COUTU
JOE HABEREK
DORIS ASCHMAN
GREG GERRITT
AL MANCINI
STEVE SCIALOBBA
HAROLD GARRITT
JAN REITSME
PATTI LUCCARELLI
DAVID CARR
JARED RHODES
CAROLINE KARP
LOU LANNI
CHRISTIAN CAPIZZO
ANGELO LIBERTI

1   OTHER ATTENDEES:

2   MIKE WALKER
       SHEILA DORMODY
3   DAVID TURIN
       PHIL HOLMES
4   LESLIE QUISH
       MICHAEL GAGNON
5   BEN NASCENZI
       TIM THIES
6   JOE MASINO
       MEG GOULEF
7   KEITH GARDNER
       KATHRYN KELLY
8   GREG GERRITT
       STEVE SCIALABBA
9   GEORGE PALMSCIANO
       LOU LANNI
10   BEN SALVATORE
       LANCE HILL
11   DAVID BEDOYA
       HAROLD GADON
12   JAMES TOOMEY
       ALICIA GOOD
13   WILLIAM SEQUINO
       JAMIE SAMONS
14   MELISSA CARTER
       JAMIE SAMONS

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 1   (The hearing commenced at 1:03 p.m.)

 2   MR. DOMENICA: I would like to be the

 3 first to welcome you to the first stakeholder, CSO

 4 stakeholder meeting for Phase III. Looking ahead

 5 to Phase III, on behalf of the Narragansett Bay

 6 Commission, welcome. If you're in this room for a

 7 different reason, you may want to leave quickly,

 8 sewers and waste water can be catchy, as we all

 9 know.

10   My name is Mike Domenica. I am pleased

11 and honored to be asked to be a

12 moderator/facilitator for these workshops. This

13 is the first of six different workshops we'll

14 have. I was also pleased to be part of the first

15 stakeholder workshop, which is 18 years ago. And

16 I look around the table and see a number of faces

17 of people that went through that process there,

18 which was a two-year process, that actually was

19 very successful as we went through it,

20 stakeholders starting off from different

21 perspectives, not really understanding the

22 missions and agendas and interests of different

23 groups.

24   By the end of the process, it came

25 together. And it's a remarkable success story

1   over the last 18 years through the first two

2   phases of the CSO program, to be able to put in

3   place the tunnel system and the Woonasquatucket

4   interceptor and other facilities has been a

5   remarkable achievement in this day and age. Ray

6   was just remarking to me how he is tired of

7   construction.

8   MR. MARSHALL: I've had it.

9   MR. DOMENICA: But it has been a very

10 successful process, and in a large part due to the

11 stakeholder process that preceded it.

12   So why are we here now? We're here

13 because as the Commission comes to the end of the

14 Phase II program. The question is, what will

15 Phase III look like?

16   Of course, there is a plan on the

17 books, but the world has changed. The regulatory

18 framework has changed, technology has changed, the

19 physical infrastructure around us has changed.

20 There has been a lot of change.

21   In addition, you have the issues of

22 debt, debt service, infrastructure priorities; in

23 addition to water infrastructure, in addition to

24 wastewater and CSO, all types of infrastructure

25 problems. So the economic environment we're

 1   facing is different than it was 18 years ago.

 2   The federal programs for support of

 3   these types of projects has changed dramatically.

 4   And the priorities, as we will talk primarily

 5   about priorities as we go through the next nine

 6   months next year. So we'll see how the priorities

 7   have changed as well.

 8   The purpose of the workshops is to

 9   basically understand what's happened in the last

10   20 years. For those of you who are new to the

11   process, it will be -- hello, Angelo. He's one of

12   our alumnae from many, many of these types of

13   programs. Angelo was at one of the first

14   workshops years and years ago.

15   But to understand what happened over

16   the last 20 years, understand the current

17   situation, and look at the options going forward.

18   And one of the big objectives is to get on the

19   same page with regard to terminology, with regard

20   to understanding.

21   There's a lot of acronyms, a lot of

22   terms we talk about in the business, but to get

23   everybody talking about the same thing, so when

24   someone says something, green infrastructure or

25   storm water management, or whatever it is, there's

1   a common understanding of it. So that's a big

2   purpose of these, to understand of course the

3   costs, the benefits, the implications, and I think

4   most critically, the uncertainties related to the

5   future.

6   This business of wet weather management

7   is very complex. If you haven't been through this

8   before, you'll be astounded. You'll be

9   frustrated. You'll be tearing your hair out,

10   because the terminology and the process of going

11   through wet weather planning, wet weather

12   management, wet weather projects is very complex.

13   Whereas we used to be able to look at a

14   wastewater plant inside a fence, and the abutters

15   were the people around the plant, when you're

16   talking about wet weather, you're talking about

17   the whole sewer system all over the town, all the

18   neighborhoods, all the abutters, everywhere, all

19   the streams, all the issues coming together. It's

20   a complex process, and it will take real attention

21   and commitment on behalf of you folks who are here

22   today.

23   I want to thank you on behalf of the

24   Commission, as well as Ray will, for being here

25   and committing the time. The goal here is to

 1 assist and advise the Commission as they go

 2 forward to defining what Phase III will look like.

 3 And your participation is critical and very much

 4 appreciated.

 5   Some preliminaries. Before we go

 6 around and have introductions, bathrooms are out

 7 the door in the hallway, right out there. Who

 8 doesn't have a cell phone? Great. Don't turn it

 9 off. Everyone else, if you could be courteous,

10 turn off your cell phones, or at least put it on

11 vibrate. That would be nice.

12   The session is being recorded. We have

13 a court reporter, Margaret Golden, who we welcome.

14 She is recording our commentary and questions as

15 we go through. And the emergency exits are out

16 this door and to the right at the end of the hall,

17 I believe.

18   Having said that, what I would like to

19 do is go around the table now for the stakeholders

20 and have each of you introduce yourself with your

21 name, your affiliation, and then, just so

22 everybody is on the same page, some affiliations

23 aren't necessarily immediately recognizable with

24 regard to their mission by the name, so what's

25 your affiliation's mission here in Rhode Island.

1 So start there.

2   MR. COLT: Good afternoon. My name is

3 Ames Colt. I chair the Rhode Island Bays, Rivers,

4 and Watershed Coordination Team. The coordination

5 team is a seven-state agency commission dedicated

6 to interagency strategic planning and investment

7 for our fresh and marine water and watersheds. I

8 am based administratively at DEM, but I serve all

9 the agencies on the Commission or the team on

10 behalf of the governor. I'm actually based in the

11 office of the governor. Great to be here.

12   MR. HILL: My name is Lance Hill. I'm

13 the Public Works Director for the City of

14 Pawtucket.

15   MR. COUTU: Good afternoon, Steve

16 Coutu, Director of the City of East Providence.

17   MR. HABEREK: Joe Haberek, engineer in

18 DEM, Office of Water Resources.

19   MS. ASCHMAN: Doris Aschman, Rhode

20 Island Department of Health, engineer in drinking

21 water quality.

22   MR. GERRITT: Greg Gerritt. I

23 originally represented the green party at the

24 stakeholder process. I don't know if I'm

25 representing them these days, but I work with

1   Friends of the Moshassuck and the Environment

2   Council of Rhode Island, and I'm also part of the

3   new group looking at green infrastructure,

4   generally in Providence and Newport.

5   MR. MANCINI: Al Mancini from the Rhode

6   Island Department of Utilities and Carriers. I'm

7   the Division's engineer in water and wastewater.

8   MR. SCIALABBA: Hi, Steve Scialabba

9   with the Division of Public Utilities and

10 Carriers. I'm an accountant. We oversee -- the

11 Commission actually regulates NBC's rates and how

12 this program affects rates.

13   MR. GADON: Harold James Gadon of the

14 CAC system advisory committee to the NBC

15 committee, without any authoritative powers. We

16 have been following Phase I and Phase II quite a

17 long way.

18   MR. REITSMA: I'm Jan Reitsma

19 representing Governor Chafee.

20   MS. LUCCARELLI: Patti Luccarelli. I'm

21 an attorney with the Public Utilities Commission,

22 and we approve all NBC's rates.

23   MR. CARR: David Carr of Cumberland

24 Sewer Department.

25   MR. RHODES: Good afternoon. Jared

 1 Rhodes, Chief Rhode Island Statewide Planning

 2 Program. My primary mission is to staff the Rhode

 3 Island -- and integrate the physical, economic,

 4 and social development of the state to various

 5 agencies and municipal governments.

 6   MS. KARP: I'm Caroline Karp, Brown

 7 University Environmental Studies. When I was on

 8 this advisory committee 18 years ago, I was the

 9 director of the Narragansett Bay Estuary Program,

10 and I also served on the Bay Commission's

11 Citizen's Advisory Committee. I continue to have

12 many students work on bay water quality, logical

13 public policy and law problems. So I follow all

14 this.

15   MR. LANNI (phonetic): (Inudible)

16   MR. BENDER (phonetic): Deputy

17 director, department of public works.

18   MR. CAPIZZO: Christian Capizzo, Special

19 Assistant to the Attorney General, Rhode Island

20 Attorney General's Office Environmental Unit.

21   MR. LIBERTI: Angelo Liberti, Chief of

22 Water Protection at DEM.

23   MR. DOMENICA: And I notice Dave Turin

24 and others at the table that I think are key to

25 this process. If you could introduce yourself as

 1   well.

 2   MR. HOLMES: Phil Holmes. I represent

 3   the Rhode Island Shellfishermen's Association and

 4   the Citizens' Advisory Council. And I was an

 5   original stakeholder.

 6   MR. TURIN: David Turin with the US

 7   Environmental Protection Agency and Water

 8   Enforcement Program.

 9   MS. DORMODY: Sheila Dormody, the City

10   of Providence.

11   MR. WALKER: Mike Walker with Commerce

12   RI, the state's economic development agency.

13   MR. TOOMEY: James Toomey, the

14   sustainable lab coordinator at Blackstone Valley.

15   MR. DOMENICA: I see a number of folks

16   in the back there that --including the consultants

17   who you'll be getting to know quite well. Tom

18   Brueckner and Kathyrn, who have been leading the

19   program. Jamie, the public affairs director at

20   NBC. He'll be speaking, and you'll be getting to

21   know them quite well.

22   With that, what I'd like to do now is

23   turn it over to Ray Marshall, Executive Director.

24   Ray will say a few words.

25   MR. MARSHALL: First of all, I want to

1 welcome and thank you for taking the time out of

2 your busy schedules to take part in this effort.

3 There will be a series of six meetings, as you

4 know, and we really need your input. And while

5 there might be some times when you just want to

6 sit there and listen passively to what we've

7 already done and what we're planning to do, there

8 are going to be other times when you will want to

9 speak out. And we want to encourage you to do

10 that.

11   The first time we went through this

12 process, the first meeting or two, it was very

13 interesting, a little on the chaotic side,

14 actually. I mean, the views and opinions were

15 just incredible. But over the course of time, we

16 actually agreed as a group to a particular plan,

17 which we have followed.

18   You can see the pictures up on the wall

19 there of the main spine tunnel that was built

20 several years ago. And our commissioners and

21 chairman want you to have input. Don't think that

22 anything you say is unimportant to us, because it

23 isn't. The biggest concern our Commission has

24 right now is the affordability of the program.

25   Phase I and II plus upgrading the

 1   treatment plants have cost just over $700 million.

 2   And right now we estimate, the way Phase III is

 3   envisioned, it will cost another $500 million. So

 4   the rates have gone from 165 to 5 and a quarter or

 5   530, somewhere around there, for the average

 6   single-family home owner. Very concerned about

 7   that.

 8   We're trying to find ways to control

 9   that rise in rates. And it's almost primarily or

10   exclusively because of debt service. There are

11   some O&M expenses. Obviously, when you build new

12   facilities, you have to run them. But it's

13   primarily the debt service that drives the rates,

14   or has been driving the rates.

15   So we're trying to find new and

16   innovative ways to address the problem, such as

17   green infrastructure. And we're trying to

18   identify ways of mitigating the impacts of other

19   work that we know we're going to need to do in

20   Phase III. And so we welcome your input. If you

21   have ideas that have worked other places or things

22   that you want us to consider, please let us know.

23   And there are some people that were not

24   able to be here today or as yet that will --that

25   are part of the stakeholder's group. So we'll

 1 have a few other voices that will be joining in

 2 along the way.

 3   And with that, I'll turn it back to

 4 Mike. Again, thank you for your time and your

 5 interest.

 6   MR. DOMENICA: Before the meeting

 7 started, Rich Raiche with Montgomery Watson made a

 8 comment that I look like a news anchor up here

 9 with my coat on and everything. And it reminded

10 me of the little cartoon, you may have seen it

11 years ago, where the news anchor on a TV news show

12 in the evening says, "Now we're going to turn our

13 attention to the upcoming rate hike. And through

14 the sewers, about the sewers." And he said,

15 "Anybody interested in hiking through the sewers,

16 show up at such and such a place tomorrow

17 morning." You all are interested in sewers. And

18 it binds us all together.

19   A little ground rules regarding these

20 meetings, just so that we're on the same page.

21 With regard to attendance, obviously you all are

22 committed. These meetings are critical, as Ray

23 emphasized. Missing a meeting, given the relative

24 infrequency of them and the amount of work that's

25 done, is critical. So it's so important to attend

 1   every meeting. If you can't make one and have an

 2   alternate, that would be imperative as well.

 3   We need to begin and end on time. I

 4   tried my best today. We did a great job. That

 5   will be my responsibility as we go forward. If we

 6   start late, we don't want to finish late. Both

 7   are bad, so that's my job.

 8   Stay on subject and follow the agenda.

 9   We'll have an agenda for every meeting. There's

10   presentations set up and time for questions and

11   answers. There's a lot of possibility and

12   opportunity for dialogue. So we will stay on

13   schedule.

14   One person at a time speaking.

15   Generally that's not a problem, never was the

16   first time. The problem was little side meetings

17   going on everywhere. We had one or two multiple

18   side meetings at times.

19   Listen to understand, not to

20   contradict. Try to understand. As I said, these

21   issues will be complex. Understanding doesn't

22   just come right away all the time. It takes kind

23   of tossing it around and digesting it once or

24   twice before the light bulb comes on. So listen

25   to understand.

1   There's no right or wrong answer at

2 this point. We're looking at existing situations,

3 future situations, and what the options are going

4 forward. So nothing is right or wrong to start

5 with.

6   Engage. As Ray indicated, engagement

7 is critical. Silence infers consent. Doesn't

8 mean consent, but it infers it. Infers

9 understanding. So if you don't understand

10 something, or if you have a different perspective,

11 please try forth with it.

12   Respect the views of others. Check

13 your understanding by asking questions. Going

14 back to that same point. If you're not quite

15 sure, don't be shy. Ask a question. Clarify it.

16 I suspect there will be a high percentage of

17 people in the room asking the same question that

18 don't want to step up and ask it. So feel free to

19 ask the question.

20   Constructive, respectable debate is

21 desirable. Debate is desirable. We want it to be

22 constructive and looking toward the issues, not

23 toward positions or people, but toward issues.

24 That's the key.

25   We have a parking lot at the back that

 1   issues come up, questions that come up, that are

 2   related to the subject but not particularly

 3   necessarily to the agenda of the day. It will be

 4   put in the parking lot. And after the meeting,

 5   we'll put them in the right place in the future or

 6   pick them up at the end of the meeting, if we have

 7   time.

 8   We will have breaks. There's coffee,

 9   water, and other things at the back, but they are

10   breaks, not sabbaticals. So try to make them

11   short. Try to reconvene everybody.

12   We mentioned cell phones, laptops,

13   communications. I'll shut mine. And lastly,

14   follow the ground rules.

15   So with that, any comments or

16   suggestions on the process and goals?

17   FROM THE FLOOR: Are you going to

18   publish a calendar of all the meetings?

19   MR. DOMENICA: Yes. It will be

20   published. There will be a website. There is a

21   website right now.

22   Tom, do you want to --

23   MS. SAMONS: At the end of the meeting

24   all the presentations will be available on the NBC

25   website, as we have the transcripts. Also agendas

1   are coming.

2   FROM THE FLOOR: The website is on the

3   bottom of the agenda?

4   MR. DOMENICA: The agendas for the next

5   meetings will be there as well.

6   THE COURT REPORTER: May I make a

7   comment? Because I don't know all your names, and

8   I couldn't possibly remember everybody who

9   introduced yourself, if you could kindly just

10   state for the record, if you want to make a

11   question or a comment, just say your name, and

12   that would be great. That way I can have your

13   name properly included in the transcript. Thank

14   you.

15   MR. GADON: Harold Gadon. This is a

16   mandated issue. It's not a matter of whether or

17   not we will do it. It has to be done, so we'll

18   decide the best way to get it done.

19   MR. DOMENICA: Anything else? Don't be

20   shy.

21   MS. KARP: I want to cover --

22   MR. DOMENICA: Caroline Karp.

23   MS. KARP: Caroline Karp. I have often

24   a lot to say. And I follow this issue closely,

25   because my group authored the NBC element of the

1 state guide plan.

2 One way of managing a meeting is to let

3 everybody speak before the same person speaks

4 again. That will keep a person like me in better

5 control. Let me just say, we both are capable of

6 talking quite a bit.

7 But I also -- I guess I want to just

8 say from the start, it seems to me we ought to

9 explore everything with the state of the water or

10 state of the bay, and not assume that Phase III is

11 preordained. And I say that based on my position

12 on Phase I.

13 MR. DOMENICA: Good. Thank you.

14 Regarding precluding people from speaking twice in

15 a row, or until everyone else is speaking, we

16 would probably -- won't lay down that strictly as

17 a guideline. I'll take some responsibility for

18 making sure it's spread around.

19 There will be times we may go around

20 and ask each stakeholder their opinion. If you

21 have no opinion, that's fine. Or if you want to

22 withhold it, that's fine. But that gives everyone

23 an opportunity to speak. We will do that at

24 times.

25 Anything else? Thank you.

1   The first order of the business on the

2   agenda is Tom Brueckner, who will give a

3   presentation on CSO program overview.

4   MR. BRUECKNER: Okay. Welcome all to

5   the second stakeholders' group. One thing I want

6   to just talk about is the parking lot. I don't

7   think Mike was returned to the parking lot. It's

8   hard to find a space to park. It's that board

9   over there we'll be writing on.

10   One other thing. As you know, next

11   week is -- on Monday is Saint Patrick's Day. So I

12   just had a question.

13   First question of the group is, what is

14   Irish and comes out in the spring? Anyone?

15   MS. KARP: Clover.

16   MR. BRUECKNER: No, it's patio

17   furniture. So it's good to get them laughing

18   before we start.

19   So I'll talk about the reevaluation of

20   the Stage III NBC program. I've been involved in

21   the CSO program actually since the beginning, in

22   1990. So I'm pretty old. And I know a lot about

23   CSO's, and I think not everyone here does.

24   So I just want to do a little bit of

25   background. The first question is, what is a

 1   combined sewer overflow? Most of you know, but

 2   for those of you who don't, what happened when the

 3   city was developing in the late 1800's, the city

 4   built sewers. This is the city of Providence.

 5   The sewer was built and discharged

 6   directly to the river. They didn't have any

 7   treatment plants back then. When they built the

 8   sewer system, they built a combined system;

 9   meaning, it took flow from both houses,

10   businesses, sanitary flow from toilets, and the

11   storm run-off from streets all went into the same

12   pipe and discharged to the river. Dry weather,

13   wet weather, whenever.

14   By the way, the city of Pawtucket and

15   the city of Central Falls also have combined

16   sewers, and those sewers were built about -- early

17   on, about the same time as the sewers from

18   Providence. In the early 1900s, when the city of

19   Providence realized they were having real

20   pollution problems, they built a treatment plant

21   over here at in Fields Point across the street.

22   And they also made changes to the sewer system by

23   putting in a slot at the bottom of this pipe that

24   goes out to the river to direct the flow in dry

25   weather into an interceptor sewer that they built

 1 close to the plant.

 2   In Providence that was done in the

 3 early 1900's. In Blackstone Valley, Bucklin

 4 Point, in Pawtucket and Central Falls area, it

 5 wasn't done until the 1950's. Quite a lot of time

 6 passed between those two communities.

 7   Now when it rains, though, the combined

 8 sewer takes the flow into the storm water and the

 9 sanitary flow into the outfall pipe. It can't all

10 fit into the interceptor and go into the treatment

11 plant. So what happens is in wet weather we have

12 discharges of storm water mixed with sanitary

13 sewage.

14   And because of the sanitary sewage

15 that's in the outfall or the overflow, we have

16 severe pollution problems, primarily bacterial

17 problems. And it's basically a public health

18 problem. So by federal law, CSO's must be

19 addressed to meet the water quality standards.

20   As I just mentioned, the primary

21 pollutant of concern is bacteria. It affects both

22 shellfishing and the use of water for bathing.

23   Another pollutant of concern is

24 floatables, probably not as much as bacteria, but

25 it's basically just the material that comes up

 1   from storm sewers and from sanitary discharges.

 2   In 1992 we signed a consent agreement. NBC signed

 3   a consent agreement with DEM to establish a

 4   schedule for planning, designing, and construction

 5   of the CSO facilities in order to comply with the

 6   federal law.

 7   In 1994, two years after the consent

 8   agreement was signed, we came up with a conceptual

 9   design report. It was approved by DEM to comply

10   with the Clean Water Act. The estimated cost for

11   that program was $478 million.

12   The rate increase was from -- estimated

13   from at that time $125 per year for a single

14   family dwelling, and it was projected it would go

15   up to $425 a year at the end of the program

16   construction. And construction was going to take

17   place over nine years.

18   Now, the program that was developed or

19   recommended and approved by DEM really was a

20   program to collect the flows that were going into

21   the rivers from the overflows and divert them to

22   storage facilities. And in this particular

23   alternative, we had a number of tunnels that were

24   being built, one along the Providence River and

25   Moshassuck River and one being built that would go

 1   along the Seekonk River and tie into the Bucklin

 2   Point plant.

 3   This tunnel was tying into the Fields

 4   Point plant. And then there was another tunnel

 5   that was going to be built that would pick up the

 6   overflows along the Blackstone River and Pawtucket

 7   and Central Falls.

 8   Along the Woonasquatucket River, there

 9   were five storage facilities that were to be

10   built. These were near surface facilities. The

11   tunnel was going to be a deep rock tunnel that

12   would be about two to three hundred feet

13   underground. There was another near surface

14   storage facility to pick up an outlying overflow

15   in Central Falls. This was the program that was

16   going to be $478 million.

17   In 1994 we began design, preliminary

18   design of the approved CDR facilities in

19   accordance with the consent agreement. Also in

20   1994 the EPA revised the CSO policy to provide

21   more flexibility, particularly with regard to the

22   size of storm that needed to be addressed.

23   The cost implications of the program

24   and the impacts on water quality and trying to

25   relate the program to water quality standards,

1   possibly making revisions to the standards to

2   accommodate the program.

3   In 1996 we decided that we were going

4   to reevaluate the program that was approved by

5   RYDEM in the CDR for a couple reasons. One was

6   the new CSO policy. There was flexibility in the

7   policy. We wanted to see if that would be

8   beneficial to us in developing a different program

9   that might be more cost-effective, because cost

10 was a very big concern, as you saw, $478 million,

11 and increase the user rates substantially.

12   Another was technical concerns. We

13 found that when we were doing the geotechnical

14 program for the tunnels, there was some areas

15 where the rock was a little iffy, and we weren't

16 sure we wanted to put tunnels in those areas.

17   So in order to address and reevaluate

18 the program, as Mike had alluded to earlier, and a

19 number of other people around the table have

20 attended, we set up a stakeholders group to do the

21 evaluation.

22   After two years of meetings, about 18

23 months of meetings and six months to prepare the

24 recommended plan by the stakeholders and a

25 conceptual design report, it was approved by DEM

1   in 1998. The cost was reduced for this program

2   from the $478 million to $390 million.

3   The rate increase was at that time just

4   in those years that it passed, it had gone up to

5    $165 a year, because of other programs we were

6   doing. And it was estimated that after the 17

7   years for construction, so the construction period

8   was longer, which was part of the CSO policy gave

9   you more time to do the program, we estimated that

10   the rates would be $300 per year at the end of the

11   construction phase.

12   So the goals for the alternative 17 and

13   the new recommended program were that we would

14   have a 98 percent reduction in annual CSO volume.

15   Right now, the estimate is an average year we

16   discharge about 2.2 billion gallons from the

17   CSO's.

18   To put that in perspective, the

19   treatment plants we own, the two plants do about

20   20 billion gallons a year. So about ten percent

21   of the flow going through the plants goes through

22   the CSO system. We estimated that with the

23   reduction in bacterial discharges to the receiving

24   waters, we would see an 80 percent reduction in

25   shellfish bed closures, which I think most of you

 1 are familiar with, that there's a policy that DEM

 2 enforces that regulates when the shellfishing beds

 3 will be open. This program, because of the --

 4 addressing the bacteria, would see a reduction in

 5 the time those beds would be closed. And it was

 6 designed to capture a three-month storm, which was

 7 defined to be 1.6 inches of rain in six hours,

 8 which is a fairly good-sized storm.

 9   What it means to be a three-month

10 storm, we expect to see a recurrence four times a

11 year. So we were addressing basically to get down

12 to less than or equal to four overflows per year

13 from the system.

14   The program was also going to be built

15 in three phases instead of just one phase, as was

16 previously proposed. The first phase was going to

17 be completed, or actually was completed in 2008.

18 The second phase is ongoing now and will be

19 completed at the end of this year. And the third

20 phase is scheduled for completion in 2021. But it

21 remains to be seen if that's the schedule we can

22 adhere to. This is the current program for the

23 CSO's.

24   As I mentioned, there are three phases.

25 The kind of pinkish phase, first phase, is a

 1 tunnel that's going to be -- that was constructed.

 2 It goes from the Fields Point treatment plant

 3 across the street, basically up to the foundry

 4 on -- 16,000 feet long, 26 feet finished diameter,

 5 holds about 62 million gallons and primarily

 6 addresses the overflows that are along the

 7 Providence River.

 8   There was also part of Phase I -- what

 9 we were doing, working more at the Bucklin Point

10 treatment plant, we put in what are called wet

11 weather facilities. There's a very large overflow

12 right before the plant that was discharging

13 untreated storm water and sanitary flow to the

14 Seekonk River.

15   That flow is now diverted to the

16 treatment plant almost all the time, where it gets

17 primary treatment and disinfection. Again, it's

18 critical, because the primary pollutant is

19 bacteria. And with the disinfection, we really do

20 a good job at reducing the bacterial pollution

21 from there, that CSO.

22   The second phase consists of two

23 interceptors, one along the Woonasquatucket River

24 to pick up the overflows there, and one along the

25 Seekonk to pick up the overflows there. Both are

 1   near surface interceptors, meaning they are about

 2   25 feet below ground. They are done by micro

 3   tunneling.

 4   And they will be done by the end of

 5   this year. Most of the work is complete, in fact.

 6   There are also some sewer operation projects on

 7   the east side. Those are nearly complete. That

 8   picks up two overflows, one to the Seekonk River

 9   and one to the Moshassuck River.

10   And there was a wetlands facility, that

11   outlier that I told you about that was going to be

12   done by the -- near the storage facility, is now a

13   wetlands facility. It goes into a small holding

14   tank. Small storms are captured and discharged to

15   the interceptor. After the storm, anything the

16   small tank can't capture goes to a wetland

17   facility for further treatment.

18   In Phase III what's going to be a

19   another tunnel from the Bucklin Point treatment

20   plant all the way up to the Central Falls line,

21   there's two interceptors up at Central Falls to

22   pick up the overflows there. This would address

23   the overflows to the Blackstone River and to the

24   Seekonk River.

25   And then there's a fairly large

 1 overflow on the Moshassuck River that was going to

 2 be picked up by a small tunnel that will be

 3 connected to the other tunnel that was going to be

 4 built, part of Phase III.

 5   This is another graphic which basically

 6 shows the three phases but done differently. This

 7 shows the outfalls. And they are color-coded the

 8 same as the previous graphic.

 9   The Phase I overflows are shown in pink

10 or red or purple, whatever that color is. The

11 second phase overflows are shown in green along

12 the Woonasquatucket, the Seekonk and the one up

13 here, an overflow 106. And Phase III overflow is

14 shown in the yellow-gold color. Also shown on

15 this is the relative magnitude of the overflow so

16 you get a sense of what we're looking at in terms

17 of impact from various locations.

18   And the biggest overflow that we had

19 was down here right at the treatment plant, picked

20 up of most of South Providence. As you see, that

21 has been addressed by Phase I. That was greater

22 than 20 million gallons in the three-month storm.

23   We also picked up the overflow, as I

24 mentioned, at Bucklin Point, which was another

25 good size and very concentrated, because it was

 1   really a discharge from the interceptor coming

 2   into the plant.

 3   We have another very large overflow

 4   that is part of Phase III right here on the

 5   Seekonk River, another big one up on the

 6   Blackstone. This one I mentioned where the adit

 7   was going to be provided. There's a fairly big

 8   sized one out of the Moshassuck, and that's a much

 9   smaller river than the Blackstone, so it has a

10   much bigger impact.

11   Then you can see almost all the other

12   overflows are relatively small. Keep in mind as I

13   go through, I present it so you get a feel for the

14   fact we dealt with some of the big overflows along

15   the Providence River, but many of the other large

16   overflows are still of interest.

17   How does the tunnel work? I give you

18   this because we talk about tunnels in Phase III

19   and we already built one. This is flow that

20   currently goes out. This is the pipe that

21   currently goes out to the river. We put in a

22   diversion structure to divert that flow into a

23   gate and screening structure that then conveys the

24   flow to a drop shaft. That's 250 feet deep and

25   goes into an adit that connects the drop shaft to

1   the tunnel that takes the flow to the plant.

2   And that tunnel, as I mentioned, is 26

3   feet finished diameter, 16,000 feet long, 62

4   million gallon capacity. This tunnel will

5   terminate just actually across the street at a

6   tunnel pump station where the flow is then pumped

7   from the pump station after the storm and given

8   secondary treatment at the treatment plant, if we

9   have capacity to do so.

10   A very large storm will provide

11   secondary treatment for some of the flow and

12   primary treatment with disinfection for the

13   remainder. But the majority of the 1.1 billion

14   gallons that we captured since 2008 when this was

15   was done was 1.1 billion gallons per year we've

16   been capturing. Or over the five years, 5.5

17   billion gallons have gone through the tunnel and

18   received secondary treatment.

19   The majority of the flow has received

20   secondary treatment. And as I mentioned, the

21   annual CSO volume is 2.2 billion gallons. So

22   we're capturing about 50 percent of the overflow

23   volume of the current tunnel.

24   We have projected when we did Phase

25   I -- when we did the CDR we collected about 40

 1 percent in Phase I, 20 percent with Phase II, and

 2 the other 40 percent with Phase III. So Phase I

 3 is capturing a little bit more than we had

 4 estimated.

 5   This is the completed tunnel, just to

 6 give you an idea. There's no people standing

 7 there so you can get a sense of how big it is, but

 8 that is 26 feet in diameter, finished diameter.

 9 And it was just walked about two weeks ago by the

10 construction crew, and the tunnel was found to be

11 in very good condition, almost the way it was when

12 it was built.

13   This is the way we are doing the

14 interceptors, as I mentioned in Phase II. It's

15 called -- done through micro tunneling. Basically

16 you build two pits; one an exacting pit, and one a

17 receiving pit. The machine goes in here, and it

18 basically pulls the pipe behind it and burrows

19 through the ground to get from one pit to the

20 other.

21   That is what was done along the

22 Seekonk. That Seekonk interceptor and the

23 Woonasquatucket interceptor. That's what the

24 little tunnel boring machine looks like. The way

25 the main tunnel was built was with a much bigger

1   machine. Same idea, but with a 28-foot face.

2   So just to give you a summary of the

3   CSO project cost by phase, the -- I can't read too

4   well. I don't have my glasses on. But $375

5   million actual cost to finish, Phase I.

6   The projected costs for Phase II, and

7   these are pretty close. I think that says 213.

8   The estimated cost for Phase III for the current

9   program we're proposing, which is the tunnel and

10   the interceptors, is 605 million. And the total

11   cost of all three phases estimated right now is

12   1.2 billion.

13   Now, you remember the CDRA that we had

14   done back in 1998 estimated the cost for the three

15   phases at 390 million. So our estimates were

16   obviously low.

17   This shows the impact on user fees. So

18   the base, the first, the blue is the base, which

19   is cost for service in 2002, and that's carried

20   through. The green showed the increase due to

21   operational costs.

22   Obviously, we put the tunnel online.

23   We made upgrades to the two treatment plants at a

24   cost of over $100 million. So there's additional

25   costs running the plants for electricity and

1   chemicals.

2   The orange is the debt service for the

3   money we borrowed to build the facilities, the CSO

4   facilities and the treatment plants. As you can

5   see, that has been the biggest contributor to the

6   increase in user fees.

7   As I mentioned, the CDRA said that when

8   we were done with the three phases, we should be

9   at $300 for user fees. We are currently

10   approaching $585 per household user fees. So you

11   can see that we have substantially exceeded what

12   was estimated.

13   The other thing I wanted to mention is

14   that in 1994 and since, the EPA has put out

15   guidelines for affordability. And the rule of

16   thumb is it's two percent of the median household

17   income. If we use Central Falls as the median

18   household income of 29,000, we are right now at

19   $585, or pretty close to the two percent mark for

20   determining affordability.

21   So you can see that we really do not

22   have much -- in fact, there's really no capacity

23   to go beyond the two percent for some of the

24   communities in the district. And we're almost --

25   by 2017 we'll be exceeding the two percent median

 1 household income for Central Falls and possibly

 2 other communities.

 3   So we are currently looking at doing

 4 further reevaluation of the Phase III program.

 5 And the reason for doing that, there are a couple.

 6 One is obviously the cost factor, again, which was

 7 the first reason for doing the original

 8 stakeholders. And we're back because we're very

 9 concerned about the impact on rates.

10   The second reason is that EPA has

11 further -- done further guidance for CSO programs,

12 wet weather issues, and has come up with some new

13 approaches to dealing with wet weather issues, as

14 Mike mentioned. And we wanted to look at those

15 factors and see if it might result in some change

16 to our Phase III program.

17   The other reason is, when we did the

18 stakeholders the last time, there was a

19 recommendation that we reconvene the stakeholders

20 after Phase I was completed and after Phase II was

21 completed. We didn't do it after Phase I,

22 primarily because we just didn't have enough

23 information at that point to present, to see if

24 there was -- what the impact was on water quality.

25 But we do have that information now. Phase II is

1   coming online, and we thought it would be a good

2   time to reconvene, to see where we are, where

3   we've gotten to with the first two phases, and

4   then evaluate where we want to go.

5   So the reevaluation task. The first is

6   to develop a sewer hydraulic model for the Bucklin

7   Point service area. We need to do that in order

8   to do the evaluation for the alternative for Phase

9   III. You need to know what's going into the

10   facilities in order to design their size and

11   figure out how you're going to do the program.

12   The second is evaluate changes of water

13   quality since completion of Phase I and expected

14   water quality upon completion of Phases II and

15   III. So we want to project what we think there

16   will be after Phase II. And then whatever the

17   proposed program is for Phase III, what will water

18   quality look like after that. Again, this will be

19   primarily focused on bacteria.

20   And we do have quite a bit of data that

21   was collected since 2004 by our environmental

22   monitoring and data acquisition section. They

23   have been collecting samples weekly on rivers.

24   And I just bring this to light again so you can

25   see with regard to the rivers and water quality,

 1   if you're looking at the Providence River, you are

 2   really looking at the overflows that were

 3   addressed in Phase I.

 4   If you're looking at the water quality

 5   improvements that we would expect to see in the

 6   the Woonasquatucket and Seekonk River, you're

 7   looking at the Phase II overflows. They should

 8   have some impact.

 9   We also, on the Seekonk River, this

10   Phase I facility, the wet weather facilities that

11   Bucklin point has had a significant impact on

12   water quality here, which you'll see in a minute.

13   If you're looking at the Blackstone River and the

14   Moshassuck River, you're looking at the Phase III

15   facilities to address those contaminants in those

16   rivers.

17   So this is the -- very quick summary or

18   a real overview of the wet weather bacteria levels

19   before pre Phase I and post Phase I for the

20   rivers. That would be the Blackstone, Moshassuck,

21   Woonasquatucket and West River.

22   Now, I don't know if you can read that,

23   I can't read it too well because I can't see that

24   far, but the standard for fresh water rivers for

25   bacteria is the green color, the green dot, 200

1 MPN, fecal bacteria per hundred milliliters. The

2 others are gradually increasing where red I think

3 is 2,000 to 4,000 MPN per hundred milliliter.

4 Again, this is wet weather only. These are the

5 numbers we're seeing after a rain event.

6   As you can see in Phase I, pre Phase I,

7 we did -- we only met the standard at one

8 location, which was above the CSO's here on the

9 Moshassuck River. Even in those locations that

10 were above CSO's on the Woonasquatucket, the West

11 River and the Blackstone River and on the

12 Pawtucket River, we did not meet standards for

13 wet weather for bacteria. This is not even any

14 impact from CSO's. This is strictly from storm

15 water.

16   You can see that along the Moshassuck

17 River it was very bad. Again, we had that big

18 overflow up here. And along the Blackstone not so

19 bad. The water quality is pretty good on

20 Blackstone, but it's a much bigger river than the

21 others.

22   Post Phase I, you can see there was

23 some improvement in some of the locations, but not

24 very many because of the fact that we really

25 didn't address any of the overflows here. And I

1   think that had to do more with the sampling. The

2   way the sampling was done, the amount of rain we

3   were getting and storm events, you would see some

4   improvement.

5   For example, on the Pawtuxet, we went

6   down to the standard. And up on Blackstone, we

7   met the standard. But I think that had to do with

8   the rainfall that occurred during that period of

9   time, probably more than anything.

10   MS. KARP: Before you leave these

11   slides, my recollection is that it was water

12   quality in the upper bay, so below Fields Point as

13   well as what you're showing on the rivers it was

14   driving Phase I.

15   My recollection is that in fact the

16   state was meeting fecal standards in that part of

17   the bay quite often. There are green dots, lots

18   of green dots below that. And you can see a

19   little bit above as well.

20   MR. BRUECKNER: The next slide will

21   show that in the upper bay. But I want to point

22   out that -- two things. One, we're not meeting

23   water quality standards, so we're not done in

24   these rivers, obviously, and that there has been

25   some improvement, but not much. And we still need

1   to address both combined sewers. And it looks

2   like issues with storm water as well are affecting

3   rivers upstream of the combined sewer.

4   MR. LIBERTI: Can you go back to that

5   slide? I think I just realized I was looking

6   at -- I was looking at the Seekonk River and all

7   the small green dots. And I have a hard time

8   thinking that the entire Seekonk was meeting its

9   bacteria levels, but those are actually the CSO

10   locations?

11   MR. BRUECKNER: That's correct, on the

12   Seekonk.

13   MR. LIBERTI: There really is no

14   sampling data as shown.

15   MR. BRUECKNER: On that slide.

16   MR. LIBERTI: I thought, wow, there's

17   something the matter with that data.

18   MR. BRUECKNER: That's the next slide.

19   Those are CSO locations. Again, those are the --

20   yeah. Now we have the upper bay wet weather

21   bacteria levels. So there's before and after,

22   again, one pre Phase I, post Phase I. And as

23   before, the dark green is the standard. In this

24   case it's 50 MPN. Not 200. 50, because it's more

25   stringent when you're in salt water, which these

 1   water bodies are.

 2   As you go down, red is the worst. You

 3   can see pre Phase I. There's this red area here,

 4   which was the worst case, then orange, and yellow,

 5   and light green. And Seekonk was pretty bad. It

 6   was in this category.

 7   As we go to post Phase I, you can see

 8   that there is some improvement. We dropped a

 9   color from red to orange here. Still not meeting

10   standards here. The orange area went to yellow,

11   so basically we increased water quality by one

12   shade, if you will.

13   And you can see in the Seekonk River we

14   went to yellow. So we went from orange to yellow.

15   And a lot of that has to do with, I think, the

16   improvements we made to that overflow at the

17   Bucklin Point plant. And you can see down at the

18   very mouth of the river we are actually meeting

19   the standards for 50 MPN.

20   Now, there's a standard also for

21   shellfishing, which is 14 MPN. We are not meeting

22   that down here.

23   The other thing I want to show is that,

24   you can see right here where the Pawtuxet River

25   comes in, it appears there's some impact on the

 1   Pawtuxet River with wet weather. That's also

 2   affecting whether the standards are met. Again,

 3   there's no overflows of CSO's on the Pawtuxet

 4   River. If that is impacting it, it would be from

 5   storm water as well.

 6   So there has been some improvement in

 7   water quality in the Providence River as well and

 8   the Seekonk, but as I mentioned earlier, there are

 9   some big overflows on the Seekonk that are in

10   Phase III that would need to be addressed.

11   We probably see substantial improvement

12   particularly from this one here, overflow 218.

13   And the Moshassuck River and Woonasquetucket come

14   in here, and they affect this area. When we see

15   the Phase II going online from the Woonasquetucket

16   and for the Seekonk, we can expect to see some

17   improvement for the Seekonk in Phase II and

18   Woonasquetucket for Phase II and the Providence as

19   well.

20   But the Moshassuck, even after Phase

21   II, probably won't meet standards, because we're

22   not addressing anything on the Moshassuck.

23   So what's the current EPA approach on

24   meeting water standards? I mentioned it has kind

25   of been developing over the years. And right now

 1   what EPA -- what -- we have Dave Turin here, by

 2   the way, from the EPA. And I will give you my

 3   understanding of what the current approach is, and

 4   if Dave wants to speak a little bit about it, his

 5   understanding, that would be good. But I think

 6   the purpose here is really for people to

 7   understand where we are.

 8   But my understanding is that the main

 9   thing that the EPA really wants to look at now is

10   take a holistic approach to water quality

11   standards through an integrated planning

12   framework, realizing that there are many factors

13   that may affect water quality and that also we

14   need to spend money on to make water quality

15   improvements.

16   So I listed four of the main ones.

17   Obviously, in order to meet water quality

18   standards, the treatment plants need to be

19   functioning correctly. As I mentioned, we spent

20   over $100 million on the two plants, mostly for

21   nitrogen removal, which is another issue affecting

22   water quality.

23   That really doesn't have anything to do

24   about the CSO's. CSO's really are a bacterial

25   issue. We spent a lot of money on CSO's, as we

1 mentioned, 500 million dollars. Sewer

2 infrastructure, meaning maintaining the sewers.

3   Now, we only own the main interceptors.

4 And just the main interceptors, we spent a lot of

5 money rehabilitating our interceptors to get them

6 up to standards where we know they are going to be

7 functioning. We cleaned them. We repaired them.

8 We've lined them, so that they are all in pretty

9 good shape now. That's been tens of millions of

10 dollars as well.

11   In addition, the local communities have

12 miles and miles of lateral sewers that I think

13 it's safe to say some of the communities probably

14 have not maintained to the level they should have,

15 because they really can't afford the costs

16 associated with it.

17   And one of the factors is that there's

18 legislation proposed in the past that NBC take

19 over local laterals. And should we do that, it

20 would either be a cost that NBC is going to incur,

21 or if we don't take over the sewers, the local

22 communities will have a cost associated with

23 maintaining those sewers going forward.

24   And given how long there has been

25 deferred maintenance on the local infrastructure,

1 there's obviously going to be some impact on local

2 communities. Somehow we're going to have to

3 collect money and upgrade their sewers.

4   Then the last factor that is another

5 wet weather issue is storm water. As I mentioned,

6 upstream of our CSO's are not meeting water

7 quality standards, probably because of storm

8 water. And many of the local communities which do

9 have separate storm sewers now have to look into

10 how they are going to address storm water.

11   There are all sorts of federal

12 requirements for storm water, which down the road

13 may even include some form of treatment similar to

14 what we are doing with CSO's. That could run into

15 the hundreds of millions of dollars as well.

16   When you take all those factors that

17 all affect water quality or public health for

18 sewer infrastructure and then you add that on top

19 of what the current rates are, it gets to be a

20 question of, well, we can't go forward with

21 everything, so what should we spend our money on

22 first, what priorities should there be, and what

23 should those programs be.

24   So EPA has -- understands that you

25 can't afford to do everything right away. So

1   their approach is you do what you can afford now.

2   And what you can afford now is based on the

3   limited affordability, based on median household

4   income, and other factors which our consultant

5   will talk about in a little bit.

6   And the other factor is, even if we

7   were to address the combined sewer overflows,

8   finish Phase III, and we still didn't meet water

9   quality standards, it's not that EPA is going to

10   say, well, you know, you're done. And then we'll

11   just change the standards. The next thing they

12   will say is, okay, what needs to be done now,

13   what's the next thing we need to do to meet water

14   quality standards, and what is that going to cost.

15   So you're really never done until you

16   meet the standards. And in my opinion, that's

17   going to be many, many, many, many years from now

18   when you consider all of the sources of pollution

19   that we have to deal with.

20   The third task is to evaluate the

21   recommended abatement method for each overflow and

22   answer the following: Is it still the most

23   cost-effective method? Again, that would be

24   tunnels, interceptors and some sewer separation.

25   As I mentioned, I think I did mention,

 1   but we did some -- we did some sewer separation in

 2   Phase II, very disruptive to the community,

 3   something we do not really want to do again.

 4   There is some proposed for Phase III. We want to

 5   not do sewer separation. We would rather do

 6   something else.

 7   One of the alternatives we're looking

 8   at is green infrastructure instead to control the

 9   storm water at the source instead of having to go

10   into the sewer system. And we'll talk about that

11   more in a few minutes.

12   And then reevaluation of -- develop a

13   cost estimate for Phase III and determine its

14   impacts on sewer rates and affordability, based on

15   EPA criteria. And if it's not affordable now, if

16   we can't afford to do Phase III at this time,

17   maybe the relief is that it gets pushed out

18   further. And when we retire some of the debt from

19   Phase II and Phase I, and we have debt capacity,

20   then we embark on Phase III.

21   And then the last task really has to do

22   with the nuts and bolts of doing the work, which

23   is perform a map of the project area, basically

24   for doing design, conduct a limited soil rock

25   boring program, as needed. This is during Phase

 1   III only and reevaluation only, not during design

 2   of III. This is one year.

 3   By the way, the reevaluation is

 4   scheduled to be done by the end of this year.

 5   It's a one-year project. And one more thing, and

 6   stakeholders --

 7   FROM THE PANEL: Could you perhaps

 8   explain the very first task? I didn't quite

 9   understand what that is all about.

10   MR. BRUECKNER: The first step is to

11   develop a hydraulic model for the sewer system.

12   We have a hydraulic model for the city of

13   Providence. That was used to develop the design

14   for the Phase I and Phase II facilities. That

15   will tell what you can simulate in a given storm.

16   It will tell you what the overflow volumes are for

17   that storm, for each overflow, and then you can

18   design your facilities to accommodate that storm

19   in order to meet the three-month storm standard,

20   or whatever your design standard is.

21   It's really just a tool to help you

22   evaluate your alternatives as you go forward. So

23   really you have to do that first step in order to

24   do your evaluation properly.

25   I want to mention also that on task

 1 two, which is the water quality evaluation, there

 2 will be a receiving water model that will be used

 3 to predict water quality improvements for Phase II

 4 and Phase III. So we have the results after Phase

 5 I. Those are real numbers.

 6   The receiving water model to be

 7 developed under task two will predict the

 8 improvements associated with the other two phases.

 9   FROM THE PANEL: When you do the

10 hydraulic model, that only focuses on sort of the

11 hard solution, not on --

12   MR. BRUECKNER: No, you can deal with

13 green infrastructure. It's based on impervious

14 area. That's how you develop your flow through

15 the system. If you say, okay, we're going to

16 eliminate ten percent of the flow because of green

17 infrastructure, the model will be able to simulate

18 that.

19   That's actually the end of my slides.

20 Do I have time for questions?

21   MR. DOMENICA: You have plenty of time.

22 Great job.

23   MR. BRUECKNER: We need to get better

24 name tags. But we're saving money.

25   MR. DOMENICA: A question way at the

 1   back.

 2   MR. NASCENZI: My name is Ben Nascenzi,

 3   Deputy Director of Public Works in the town of

 4   Johnston. There's a concern to the outlining

 5   community staff. You said there was legislation

 6   pending in regards to NBC taking over private

 7   sewer lines, miles and miles of private lines.

 8   MR. BRUECKNER: No, not private,

 9   municipal lines.

10   MR. NASCENZI: Correct. What about the

11   private lines? There's still some hanging out

12   there. People own them through easements.

13   MR. BRUECKNER: No, they are not going

14   to be addressed in the legislation.

15   MR. NASCENZI: But all right. So the

16   municipal lines that legislation requires, is that

17   going to require another test or what, assessment

18   on the lines? Will that require that type of data

19   that's going to give you an exact assessment of

20   what is out there and what the conditions are

21   and -- it's really complicated and hard -- it's

22   hard enough anyway.

23   MR. BRUECKNER: Ray, do you want to

24   address the issue of the legislation? And if

25   you're from Johnston, you should be up here

1   instead of back there.

2   MR. NASCENZI: I don't like to sit up

3   front.

4   MR. BRUECKNER: Are you the only person

5   here from Johnston?

6   MR. NASCENZI: Yes, for today.

7   MR. BRUECKNER: If you want, you can

8   have a seat at the --

9   MR. NASCENZI: I'm fine where I am.

10   MR. MARSHALL: The legislation that's

11   being referred to, this year there has been a bill

12   introduced by the city of Pawtucket. And they

13   have asked that we take over their lateral sewers.

14   They are working with Pawtucket to get a more

15   comprehensive bill similar to the one that was

16   passed in the house in 2012, which said that we

17   would evaluate, the Narragansett Bay Commission,

18   at our cost, the concept of taking over all the

19   publicly owned sewers within our member

20   communities.

21   And it would be one of -- we have a

22   year to study it. And we would go to each of the

23   communities, for example, are you interested in

24   Providence, are you interested in Johnston,

25   Pawtucket.

1   And if you were not interested, that's

2   fine. We could just leave you out of the rest of

3   the study. If you were interested, then we would

4   evaluate what it would take for us to acquire

5   ownership of those sewers. We're not intending to

6   pay anyone any money, by the way. Community

7   representatives, we would just acquire your

8   assets.

9   And then we would determine how many

10   additional people and how much additional

11   equipment we would need to meet the standards that

12   have been set by DEM and EPA for CMOM, which is

13   Capacity Management Operation and Maintenance,

14   requirements. And then we would report back to

15   the general assembly that would say either we can

16   do it or we can't.

17   And if we can do it, this is how much

18   it would cost. Do we want to move forward.

19   That's what the plan is for all the publicly owned

20   sewers. So not the sewer line going to your

21   house.

22   MR. NASCENZI: Or the storm lines?

23   MR. MARSHALL: No storm lines.

24   MR. NASCENZI: Correct me if I'm wrong,

25   but that would have a significant impact on the

 1   rates themselves.

 2   MR. MARSHALL: Absolutely.

 3   MR. NASCENZI: Is that something that's

 4   going to be forced out?

 5   MR. MARSHALL: No. That's one of

 6   those -- as I mentioned, if legislation passes, if

 7   it it did pass the house and made it to the

 8   senate, and -- it made it there for the very last

 9   stage of the session 2012. If we are going to

10   study it, as Pawtucket would like us to do, we

11   don't have a problem with that, we want to study

12   the entire system at one time. We don't want to

13   do it piecemeal.

14   So we would go to Johnston and say, are

15   you in or are you out? And the mayor might say,

16   well, tell me more. And he says, no forget it,

17   we're good on our own. So you wouldn't have to be

18   part of it.

19   Whereas Providence might want to be

20   part of it. We think Pawtucket does want to be

21   part of it, so we do it all at one time. So we

22   wouldn't do Pawtucket this year, Providence two

23   years from now, Johnston three years from now. We

24   want to do it with a good long-term plan three in

25   place.

1   MR. NASCENZI: In order to answer that,

2   okay, so there would be again a significant rate

3   increase, but now that rate increase could be

4   equalized amongst all communities, that would be

5   the same? Or you have a lesser amount in the town

6   of Johnston than you do in the city of Pawtucket,

7   but a higher cost factor for the resident in

8   Pawtucket rather than the resident in the town of

9   Johnston, or is it a unified rate amongst the

10   stakeholders?

11   MR. MARSHALL: That's a great question.

12   That's part of what we would evaluate in that

13   one-year study period.

14   MR. DOMENICA: Any other questions back

15   there?

16   MR. GAGNON: Michael Gagnon, town of

17   Lincoln. Would your acquisition include the sewer

18   pump stations?

19   MR. MARSHALL: Yes. Town-owned pump

20   stations.

21   MR. DOMENICA: One thing I think might

22   help, Ray or Tom, the term CMOM. Ray used it. He

23   defined it. But it might be worth just another 30

24   seconds on what CMOM is and what the implications

25   of it are with regard not only to NBC systems but

    1   also to community systems, just very briefly.

    2   MR. BRUECKNER: CMOM is capacity

    3   maintenance operation management of the sewer

    4   system. And we had actually done a plan for NBC

    5   basically looking at our programs to see if they

    6   met the minimum standards for maintaining our

    7   systems. And actually we -- our program is very

    8   good. It met most of the criteria for EPA they

    9   had established.

   10   I don't believe that the CMOM's are

   11   mandatory at this point, but they are recommended.

   12   Did you look at them, Dave? Are they mandatory?

   13   MR. TURIN: They are mandatory in cases

   14   where EPA issued orders with wiring -- which we

   15   have in about two-thirds of the communities in

   16   Rhode Island.

   17   MR. BRUECKNER: We did ours

   18   voluntarily. We were not under a mandate to do

   19   so, and I'm not aware of which communities do have

   20   a CMOM mandate. But the intent of it is to look

   21   at the sewer system, make sure you have mapping of

   22   the sewer system, make sure that you televised it,

   23   you know its condition, and that you have a plan

   24   to maintain those sewers, at a minimum, and to

   25   demonstrate that you don't have any sanitary sewer

1   overflows in wet weather and that you're complying

2   with all the requirements for a properly

3   functioning sewer system.

4   So obviously, there are some

5   communities in Rhode Island, maybe within our

6   district, that have CMOM requirements that are now

7   trying to address that. But I mean, our

8   assumption is that some of the communities have

9   not been able to keep up with all the requirements

10   they would need to do to maintain a properly

11   functioning sewer system.

12   MS. KARP: I have a question for Tom,

13   and it's on a different subject. It goes back to

14   this. And that is back in Phase I there was a

15   conversation about how many overflows would be

16   allowed from the tunnel per year. That's one.

17   And two, we were doing this in part to

18   try to restore a number of days of -- that the

19   shellfishing areas would be opened.

20   Can you talk to both of those? What

21   are the data of number of overflows per year from

22   the tunnel and has there been improvement and

23   what's the dollar value --

24   MR. BRUECKNER: I don't have the actual

25   number of days for overflows, but that was for the

 1 average year. But we obviously don't hardly ever

 2 get less the average year. So some years we have

 3 more. I'm not sure about less, but it's for Phase

 4 I only. Obviously -- so I don't have that data.

 5   With regard to the shellfishing, I do

 6 know, and I don't have that information probably

 7 as readily as maybe Tom might with regard to the

 8 improvements, but I do know the closure policy for

 9 shellfish areas being opened has changed by the

10 DEM. And I don't know if Angelo or Tom would want

11 to speak to that.

12   MR. UVA: The upper--

13   MR. BRUECKNER: That's Tom Uva from the

14 Narragansett Bay Commission.

15   MR. UVA: The upper bay, conditional

16 area A and B is closed with half inch rain or an

17 inch of rain. And now it's .8 inches of rain and

18 an inch and a half of rain. So the regulations

19 have been relaxed. And it's resulted in

20 approximately 40 extra days of shellfishing a year

21 at this point.

22   And based upon the data that we've seen

23 since 2008 when the tunnel went online, that's

24 about seven times a year where our wet weather

25 facilities at the treatment plan go online, which

 1   means the tunnel is full. But we have been -- the

 2   weather is much wetter than it used to be. We

 3   have more frequent and more intense storms. So

 4   that also has an affect on the performance of the

 5   tunnel.

 6   MS. KARP: I actually -- I want to make

 7   sure I understand. So after the end of Phase I,

 8   we have about one additional month per year of

 9   shellfishing in the upper bay.

10   MR. UVA: I believe so. Yes.

11   MR. HOLMES: Phil Holmes with the Rhode

12   Island Shell Fisherman's Association. I can

13   answer that anecdotally. I had a member this

14   summer who worked in Area B who told me that he

15   had not lost a day's work so far this year in Area

16   B.

17   Now, there's two different standards

18   for area A and Area B. But this one guy came up

19   to me shaking my hand, pat me on the back and

20   thanking me for all the work I've done, which is

21   come to meetings, which some people don't like to

22   do. But he was ecstatic that he had gotten every

23   day of the year in the area that he chose to work.

24   He chooses to work in Area B because that's his

25   area of choice.

1   There's different reasons for different

2   areas. Guys from Bristol and Lawrence stay on

3   that side. Guys from East Greenwich stay on this

4   area of the bay and so on and so forth, whether

5   they are pole breaking or diving whatever they are

6   doing. They have different places they like to

7   work.

8   And his area of choice is in Area B,

9   and he had not lost a day fishing. And this was

10   like in August when I was talking to him. So

11   we're two-thirds of the way through the year in

12   Area B, and he hasn't lost a single day. And he

13   was out of his mind happy.

14   MR. BRUECKNER: I want to mention one

15   thing. I referred to the improvements in the

16   water quality. That information was taken from

17   reports that we've prepared basically summarizing

18   the water quality data before and after Phase I.

19   And Tom, I think that that report will be

20   available soon. And --

21   MR. UVA: All the data is on our

22   website, Snapshot, narrabay.com, under the

23   Snapshot heading. Click on that link, and all of

24   our monitoring data is there. And the entire

25   evaluation of Phase I will be there within a week

 1   or so.

 2   MR. DOMENICA: A question over here.

 3   MR. MANCINI: As far as the

 4   completion --

 5   MR. DOMENICA: Your name, please.

 6   MR. MANCINI: Al Mancini from the

 7   Division of Public Utilities. As far as the

 8   completion for Phase II, I thought I heard you say

 9   that it will be substantially completed by the end

10   of this year.

11   MR. BRUECKNER: It should be. We have

12   completed -- it's 14 contracts under Phase II, and

13   I think probably ten of them have been completed.

14   The two big ones, the Seekonk interceptor and the

15   Woonasquatucket interceptor is still ongoing, as

16   is overflow 106 and some of the sewer separation

17   work on the east side, particularly North Main

18   Street. But that's probably going to wrap up this

19   summer.

20   The WCSOI probably will be finished by

21   the end of the year, going into next year, some

22   work to repair the road and so on will continue

23   beyond, but I would expect the tunnel should be --

24   these two facilities should be tied into the

25   tunnel pretty much by the end of the year, maybe

 1   early next year, December, January we should be

 2   online with those facilities.

 3   MR. MANCINI: I was just comparing it

 4   with the capital project list. And actually it

 5   still shows, although it says fiscal year 2015,

 6   which begins this July, it actually shows still a

 7   $60 million remaining for expenditures.

 8   And I was just curious, I was assuming

 9   most of that will be spent by the end of the year

10   with something moving into the following year.

11   MR. BRUECKNER: Right. Just one thing.

12   Angelo, do you want to talk about the tunnel shut

13   down?

14   MR. LIBERTI: Yeah. I guess two

15   things. I wanted to first--

16   MR. BRUECKNER: Just state your name.

17   MR. LIBERTI: Sure. Angelo Liberti

18   with DEM. I think I should get used to that by

19   now. You've reminded everyone else. Sorry.

20   I want to talk about the improvements

21   on the bay. It's very difficult. There was a

22   water quality model used to project what we

23   thought the improvements might be. And we knew at

24   the time that it wasn't going to exactly match

25   reality.

1   What's really difficult is to get out

2   there at the right time to collect the samples.

3   You need the next bigger storm. If you want to

4   change the criteria, it has to be bigger than the

5   storm you already received. We worked with NBC to

6   get that data as best we could.

7   One of the things we've been trying to

8   track is moving the line B, the southern boundary

9   of where the conditional area goes into effect.

10 Can we move that up so there's more of the bay

11 than -- that's even more difficult, because now

12 we're looking for a 1.5 inch, bigger than 1.5

13 inch, with no additional storms messing up sort of

14 the data set. But we're still working on that,

15 trying to also see if we can move that line north.

16   And I did want to mention last time,

17 sometimes there's a bit too much focus on

18 shellfishing. As Tom showed, shellfishing is very

19 important to the economy. But the Seekonk River

20 has some large discharges. And we don't get to

21 leave them there just because we're not going to

22 add enough additional days of shellfishing.

23   As we go through this process, just

24 keep in mind we do need to protect the urban

25 rivers as best we're able to under the flexibility

1   available for the fact that they are

2   recreationally used, not only for their impact on

3   shellfishing. I'm sure that will come out going

4   forward.

5   MR. BRUECKNER: Do you want to mention

6   about the tunnel shut down?

7   MR. LIBERTI: Yes. We just issued a

8   joint press release with the Bay Commission,

9   because they are coming to the final stages of

10 Phase II, and they need to basically break through

11 the wall of the tunnel and connect the Phase II

12 into it.

13   So obviously we have to protect the

14 workers who are going to be down in the tunnel

15 making that cut. So they are going to stop using

16 the tunnel for about three weeks. That's the

17 estimate.

18   During that time there won't be any

19 flow directed into the tunnel. So because of

20 that, we're going to have to switch our closure

21 criteria back to what they were before the tunnel

22 was built. That will put Area A back to --

23   MR. HOLMES: So I can let my town know,

24 when is that going to be?

25   MR. LIBERTI: They are going to start

1   Wednesday. Next Wednesday is the estimate. And

2   then it will depend on whether or not rain events

3   occur, whether there truly is any impact. But

4   that will be a three-week period where A is back

5   to a half inch closure and B goes back to about a

6   one inch.

7   Then after that, they will be able to

8   resume the use of the tunnel, but not at its full

9   capacity, again, to protect the workers and do

10   work. They will use the tunnels a little bit

11   less.

12   So we'll be able to go to the new

13   criteria, the .8 and 1.5, as long as the tunnel

14   capacity doesn't get exceeded. So all and all,

15   after the first three weeks, I think the Bay

16   Commission's estimate is after that there might be

17   three to five times in a typical year that the

18   reduced capacity gets exceeded. So we'll do our

19   best.

20   One of the things we did with NBC

21   before was, until we had enough data to set the

22   new criteria, we went out after a rain event to

23   track how fast it recovered. And we got permits

24   from the FDA.

25   So once we saw a recovery and nothing

1   else coming down the Providence or Seekonk to

2   affect them, we could reopen it early. So if that

3   opportunity presents itself and we have to close

4   it during this reduced capacity, we'll try get out

5   there and see if we can reopen it earlier than the

6   seven days.

7   So we did actually -- we asked that it

8   be posted on the shellfish management plan. The

9   state is working on a shellfish management plan.

10   They have a LISTSERV. So right before I came

11   here, but I was late, I asked them to post that to

12   everyone who is part of that LISTSERV, as well as

13   Rhode Island Marine Fisheries. We have a LISTSERV

14   as well. So I asked that it be sent out through

15   that. And we sent it through the press outlets as

16   a joint release.

17   MR. COLT: Ames Colt, coordination team.

18   To build on Angelo's statement, in terms of water

19   quality benefits, assessing feasibility of a

20   project depends a lot on that. Shellfish are very

21   important. There are other benefits that -- other

22   uses of the bay that we are going to be investing

23   in over time.

24   We are going to be working on marine

25   debris removal in the Providence harbor area. We

 1 are now seeing water quality at former beaches

 2 start to become good enough that we can consider

 3 reopening them, if we can get municipalities to

 4 agree to work with various stakeholders on that.

 5 So the ability to expand the suite of uses in the

 6 upper bay and the level of benefits hence that are

 7 generated is going to be an important

 8 consideration.

 9   Three basic points. We already had a

10 good introduction from Tom on how there are a lot

11 of moving parts to this. And it is important to

12 keep in mind that with Sheila's leadership we are

13 pursuing a very ambitious assessment of an

14 inter-municipal storm water utility district for

15 the upper bay that at this point comprises six

16 municipalities. Phase II of that work starts

17 hopefully later this summer. We'll have a Phase I

18 report coming out.

19   That is looking at what are the needs

20 for better to remember water management among six

21 to seven municipalities and what would it take

22 financially to fulfill those needs and how that

23 would impact the individual municipalities and

24 individual homeowners, property owners.

25   That work, over time, could generate

 1   information such as hydraulic analyses that may be

 2   of value in looking at CSO abatement Phase III.

 3   We have just begun a nutrient management

 4   assessment for the upper bay. Now that Fields

 5   Point and to a certain degree Bucklin Point have

 6   been upgraded to enhance nutrient removal, as well

 7   as other major wastewater treatment facilities on

 8   the bay, that will give us more information on the

 9   feasibility of alternative nutrient control

10   strategies that might help.

11   That's not -- you know, CSO abatement,

12   as Tom emphasized, is about pathogens, but there

13   will be considerations in terms of cost landing on

14   the rate payer base for NBC that will factor into

15   this consideration.

16   In 2004 the general assembly gave the

17   Rhode Island executive branch a very explicit

18   coordination mission, to be able to look at a

19   variety of these large complex projects together

20   in a more integrated ecosystem based management

21   way. That's the coordination team. We very much

22   want to see this project proceed in relationship

23   to these other critical water quality based

24   efforts that are underway for the upper bay.

25   And then there's two specific comments.

 1   Obviously we're going to have to recalculate the

 2   three-month storm versus what was used for Phase

 3   I. And that seems obviously to be a critical

 4   issue. It would be interesting to see how we can

 5   do that with support from federal agencies who

 6   look at that very closely.

 7   Finally, I believe EPA nationally is

 8   looking at reviving or expanding guidance on

 9   calculating affordability. And that information

10   in new guidance, expanded guidance, more flexible

11   ways of looking at that will be critical to

12   understand.

13   I don't know if Dave could give us a

14   little bit of a primer of what's going on.

15   MR. DOMENICA: Tom, how are we doing

16   for the time?

17   MR. BRUECKNER: Fine. We've got five

18   minutes before break. Dave, if you want to do

19   that now.

20   MR. TURIN: Actually it's not -- I

21   don't think that there's really large changes in

22   how we currently do all that. I think that the

23   guidance coming out is going to be a little bit

24   more overt about the flexibility in how you do it

25   and the various costs, you know, that rate payers

 1   absorb that can be considered and should be

 2   considered.

 3   What I've seen in draft form isn't so

 4   much talking a lot about whole new categories of

 5   cause; it's just being more explicit that yes, of

 6   course these are among the costs that can be

 7   considered.

 8   You know, and I think Tom's summary

 9   before, with regard to the -- it's really kind of

10   a lot of what's absorbed in the integrated

11   planning notion of recognizing that there are a

12   lot of different overlapping, both Clean Water Act

13   obligations but other financial obligations.

14   So there's kind of two theories. One,

15   the integrated planning that says we know you're

16   dealing with storm water. We know that you're

17   dealing with perhaps CSO, perhaps overflows,

18   normal infrastructuring and CMOM's and all that we

19   understand can be integrated in a plan which

20   prioritizes what is more important to do first in

21   determining when to proceed.

22   In terms of affordability analysis for

23   projects like combined sewer overflow, long-term

24   planning, I'm not real versed in that. I'm not an

25   economist, but the sense I have of all that is in

1   the mix. Plus there's other, you know, household

2   median income is there but also debt payment and

3   other forms of financial obligations that the

4   communities have absorbed are going to be more

5   explicitly factored in.

6   MR. DOMENICA: Thanks, Dave.

7   MR. SCHLIABBA: Steve Schliabba from the

8   Division of Public Utilities. Tom mentioned the

9   rate impacts. That's very important here. NBC's

10   current revenue requirement is about $100 million,

11   much of which is driven by the debt service for

12   the CSO Phase I and CSO Phase II.

13   And it's very hard to -- the PUC tries

14   to design rates in a fair and rational manner so

15   those responsible for the cost pay for the

16   service.

17   MR. DOMENICA: Could you speak up a

18   little for the folks in the back?

19   MR. SCHLIABBA: With storm water

20   capture.

21   MR. BRUECKNER: There's a microphone

22   there that the -- could you talk with that?

23   MR. SCHLIABBA: Storm water capture and

24   clean up, there's really no fair way to assess a

25   sewer customer, the cost of the debt service. I

 1   know several years ago that PUC looked at

 2   development of a storm water rate. NBC did a lot

 3   of work looking at how they -- storm water rate

 4   could be built.

 5   Has there been any further look by NBC

 6   or anyone else in the room on the idea of

 7   expanding the base of responsible people who

 8   helped pay for these costs? I mean, you're

 9   imposing these high sewer rates on Providence,

10   Pawtucket, Central Falls, some of the poorest

11   communities. And, you know, if these costs are

12   driven by impervious surface, parking lot owners,

13   what's that have to do with the little old lady

14   who has one bedroom in the house and having to pay

15   for that through sewer charges?

16   MR. BRUECKNER: Steve, when we did that

17   evaluation of storm water fee, the problem that we

18   had as an agency, we don't own the storm lines.

19   We do own the combined sewers, and it put us in

20   the position we would be able to charge those who

21   discharged storm water to a CSO but not to a storm

22   sewer.

23   So within Providence you have on one

24   street they may have a combined sewer and the next

25   there might be a separate storm sewer. The guy

 1   over there is paying for the storm water and this

 2   guy next door might not be.

 3   We didn't have the ability to bill

 4   everyone uniformly, and it would probably be done

 5   per unit of impervious area. The current program

 6   that is being spearheaded by the city of

 7   Providence, Sheila and others, Ames spoke about,

 8   to look at storm water would rectify that by

 9   making a storm water utility district where

10   everyone would generate storm water would have to

11   pay the cost for the storm water and spread it

12   uniformly, which we were not able to do.

13   MR. SCHLIABBA: I wasn't sure I

14   understood that we were actually looking at

15   developing a fee structure in the district.

16   That's one of the things they are looking at?

17   MR. BRUECKNER: I believe so.

18   MR. MARSHALL: Sheila, would you

19   like --

20   MS. DORMODY: The six municipalities

21   finished the Phase I feasibility study and agreed

22   to move forward with Phase II, which would answer

23   all the logical questions with what's the

24   government structure, what would the rate be. But

25   what the state law allows us to do with storm

1   water district of 2002, assess a fee based on what

2   somebody is contributing to the storm water

3   problem.

4   MR. DOMENICA: One more question.

5   Caroline.

6   MS. DORMODY: We're really grateful to

7   have Ray Marshall and Tom Uva being part of those

8   conversations. Obviously they have a big stake in

9   these municipalities, figuring out the answer to

10   our problems.

11   MS. KARP: I'm guessing affordability

12   will preoccupy us, which is a good thing. But I

13   want to go back to the data showing median income.

14   And I believe it was median household income for

15   Central Falls for 23,000?

16   MR. BRUECKNER: 29, I think.

17   MS. KARP: Does the bill -- household

18   as opposed to -- what is it for the property --

19   what's the median income for the tax paying

20   property owner in Central Falls? Because renters

21   often don't pay water and sewer. So the bill

22   doesn't go to them. The bill goes to the property

23   owner.

24   FROM THE FLOOR: That's who the EPA

25   bases their economic analysis on, and that's why

1 you were shown that.

2   MS. KARP: I want to flag that as an

3 issue, because the people owning that might be far

4 more wealthy, so that this is not a burdensome

5 bill. I can understand it's a burdensome bill to

6 a renter, but I suspect they don't see those

7 bills.

8   MR. DOMENICA: Carol, what I think Tom

9 is saying is this isn't the way the rates are

10 allocated. It's the metric they used for

11 determining.

12   MS. KARP: I wanted to clarify the

13 metric, because I think that goes to the question

14 of affordability.

15   MR. DOMENICA: You're right.

16 Affordability will be a key issue going forward.

17 It is time to take a break.   Take 15 minutes.

18 (Recess taken from 2:30 p.m. to 2:44 p.m.).

19   MR. DOMENICA: Next on the agenda, Rich

20 Raiche, the project manager for Montgomery Watson,

21 the commission's consultant for Phase III, is

22 going to go through more detail what Tom went

23 through on the reevaluation approach.

24   Tom, did you--

25   MR. UVA: Yes, I want to make one

 1 clarification about shellfishing, the number of

 2 days of closure. Originally I guess the project

 3 was supposed to open additional Area B for 45 more

 4 days and A, 65 more days. The Department of

 5 Health did a study. They compared 2010 to 2006

 6 and found closures decreased by 44 percent, the

 7 number of closures, and closure days by 82

 8 percent. It was much more than 40 days. I wanted

 9 to get that on the record.

10   MR. RAICHE: Great. Well, it looks

11 like everyone stuck around, so thanks for your

12 stamina, at least.

13   Just to give you an idea of what we

14 have in store for the rest of the afternoon, we

15 will start with an introduction of the consultant

16 team and an overview of the current Phase III

17 components, get into a little bit of how we'll

18 evaluate alternatives to those baseline

19 conditions, including the source pathway receptor

20 approach to alternative analysis, some of the

21 green storm water infrastructure that Tom alluded

22 to that's new since the last time. That

23 stakeholder group convened into the grey

24 infrastructure alternatives, talk a little bit

25 about the water quality model we'll be reviving

 1   for this reevaluation, spend a little more time on

 2   the integrating training framework, since that is

 3   a new approach to this sort of planning effort,

 4   and new to everybody, frankly, in the room. And

 5   that dovetails right into the affordability,

 6   lingering on affordability and wrap up with an

 7   overview of the remaining five meetings and

 8   definition of what those look like.

 9   Before we get into that, it's important

10   again, you know, I think you have a sense that

11   this stakeholder group is extremely important to

12   the success. We've got one year really here that

13   we're targeting to reevaluate and redefine what

14   Phase III is.

15   And while ultimately -- aside from the

16   fact that the consulting term is absolutely

17   wonderful, you guys are the ones with the

18   information, the data, the knowledge, and regional

19   understanding that will really help redefine what

20   Phase III looks like. And this group therefore is

21   probably one of the most important components of

22   our overall effort in the next year.

23   So the consultant team is comprised of

24   MWH, Pare, and ASA. MWH, where I am employed, is

25   the project team leader. We are roughly 8,000

employees in 35 countries. Our sole focus is on

wet infrastructure. We do drinking water,

wastewater treatment plants. We don't do bridges

or roads or anything else. Our sole focus is on

wet infrastructure. And our mission is to build a

better world.

So the idea of sustainable

infrastructure is incorporated into our DNA. Pare

is our partner on the project. They are planners,

engineers, geotech engineers. They are based in

Lincoln, Rhode Island and Foxborough,

Massachusetts. They have worked with

municipalities within the district and elsewhere

in Rhode Island and Massachusetts.

We also have on the team ASA, the same

group that did the water quality model for the

previous planning effort. We have them right back

on board to revive that model. Again, MWH focuses

exclusively on wet infrastructure. Therefore the

wet weather CSO types of projects are a large

component of what it is we do.

We have expertise in this area

throughout the United States and elsewhere,

frankly. Who cares. Sorry. Because of that, we

are at the forefront of the integrated framework

1   process. This is a relatively new way of looking

2   at these projects, and we've done some of the very

3   first ones of it, and we're working at several

4   levels on advancing the IPF philosophy.

5   Our team, many of whom you will be

6   seeing at these stakeholders meetings, and very

7   likely outside these stakeholders meetings as

8   well, is organized-- Matt Travers is our principal

9   in charge. Unfortunately, he couldn't be here.

10   So we did one better. And his right hand, Melissa

11   Carter is here, if you want to stand up and wave.

12   That's Melissa, and I'm Rich Raiche, the project

13   manager for the reevaluation.

14   My right hand is Nick Anderson, our

15   technical lead and chief modeler. I guess my left

16   hand is Keith Gardner, civil engineer. I'm

17   running out of body parts. David Bedoya, water

18   quality expert. We also have with us today George

19   Palmisciano, senior vice president at Pare and Tim

20   Thies, project manager at Pare.

21   We also have, and this is going to be

22   very important, we'll try to save as much time at

23   the end for questions and answers, Greg Bard is

24   here. He's our financial capacity analysis guru.

25   Am I missing anybody? Thanks. We're also drawing

1   on expertise from across the country to help us

2   develop the plan. We have additional local staff

3   that we just didn't bring down, but I thought it

4   was important that we introduce some of the key

5   players in each one of the different disciplines.

6   So the Phase III baseline, and this is

7   what was in the current CDRA, the current plan,

8   the main focus is the tunnel and the interceptors

9   to capture the flows from about a dozen CSO's,

10   sewer separation for four additional areas and

11   then the remaining dozen CSO's are regulated

12   through adjustments to the regulators so that we

13   distribute the flows to these other central

14   abatement facilities.

15   The probably marquis part of Phase I

16   was the main spine tunnel. And again, the marquis

17   component of Phase III is the Pawtucket tunnel,

18   planned to extend from the Bucklin Point treatment

19   facility in East Providence all the way up to sort

20   of the corner of Central Falls and Pawtucket,

21   right there on the Blackstone River.

22   13,000 linear feet, 26 feet in

23   diameter, about 51 million gallons' worth of CSO

24   storage. Again, like the main spine tunnel, deep,

25   big, does a lot of good. In addition to that, a

1   couple of large interceptors similar to the ones

2   that Tom was showing you that would be deep

3   interceptors that pick up a few of the additional

4   CSO's north of that point, one reaching up on to

5   Central Falls, I guess it would be the west side

6   of the Blackstone River, and another on the east

7   side of the Blackstone River to pick up outfalls

8   in Pawtucket.

9   And then if you think back to one of

10   the larger dots, outfall 219, 220, on the

11   Moshassuck River, there's a large one that we will

12   need to address and spend a lot of care on,

13   because the relative flow in the Moshassuck versus

14   the Blackstone is much lower. So that CSO is

15   responsible for larger water quality problems in

16   that river.

17   Unfortunately, it's sort of on the

18   opposite side of town from the tunnel. So a

19   couple of alternatives that even the CDRA had was

20   a spur tunnel, deep spur tunnel, or an interceptor

21   essentially cutting across Pawtucket.

22   Sewer separation for four areas, one a

23   very small area in Pawtucket to the Blackstone

24   River, and then three areas in northern Providence

25   to the west of Moshassuck rivers.

1   As Tom alluded to, sewer separation in

2   these areas, and you know, there's an adjacent

3   area that's currently under construction, they're

4   finishing construction. And these areas, we're

5   talking very narrow streets, very densely

6   developed. The buildings are essentially right up

7   to the right of way. We already have water and

8   gas in the streets, a lot of topography. A lot of

9   rock. So sewer separation in these areas is

10   extremely difficult and costly.

11   So we'll be spending a lot of time

12   focusing on how to reduce the extent of sewer

13   separation, finding more cost-effective

14   alternatives to that. How do we evaluate this?

15   This is another change from the way things were

16   done 15, 20 years ago. The process by which MWH

17   evaluates these alternatives is the source pathway

18   receptor approach.

19   The easiest way to think about the way

20   that we look at this is to imagine that you're a

21   drop of rain water. And follow your course as you

22   go from the sky to the river and the bay. When

23   you fall on the land your -- you will first

24   encounter a source control. These are typically

25   like the green storm water infrastructure pieces

 1   that we were talking about a little bit earlier.

 2   They tend to be smaller scale, but they are spread

 3   over a wider area.

 4   The pathway, once the raindrop gets off

 5   of the private land into the road and into the

 6   closed pipe system, that's where the pathways are.

 7   This has been historically the focus of sewer

 8   separation, interceptor relief, near surface

 9   storage, things like that.

10   Finally, once you get through the pipe

11   networks and down towards the end of the pipe,

12   either the outfall of the treatment plant, those

13   are receptor types of controls.

14   MR. DOMENICA: I have a quick comment on

15   clarification at this point here, an explanation

16   and more detail later.

17   MS. KARP: So this is a good model, and

18   I know its origin here, but one possibility here

19   is that the source is the source of people

20   contamination as opposed to rain. So you're

21   treating rain as a source that's going to be

22   controlled as opposed to bacteria, fecal bacteria.

23   I want to clarify. There's a different way to

24   look at this model. If you look at it as bacteria

25   as a source of controlling you might go all the

1   way back up to Worcester. So I just want to be

2   clear that there are different ways to use this

3   model.

4   MR. RAICHE: Yes. When we are going

5   through and evaluating all the alternatives, we

6   use a matrix like this to help us think through

7   what the ramifications are. Traditionally, CSO

8   plans were really focused on only rainfall that

9   triggers the CSO's. And typically looking at

10   pathway and receptor solutions, sewer separations,

11   interceptor modifications, and tunnels is the big

12   type of receptor control strategy.

13   By using the source pathway receptor

14   philosophy and looking at the watershed more

15   holistically, we not only enter into the mix the

16   source types of controls that can help us reduce

17   the CSO's, but we also are able to expand the

18   scope of how we look at these things beyond just

19   the CSO events but how these things operate under

20   different rainfall events and how the system

21   tracks, for example, for levels of service. Now,

22   when you might have a more intense type of storm,

23   that would impact sewer back-ups or localized

24   flooding.

25   And then even beyond that, two extreme

1   events, when you start getting into deluges that

2   cause property damage, so we are able to look at

3   the broader range of situations. Because frankly,

4   improvement in one category, if it detrimentally

5   affects another category, this probably isn't

6   something that we want to explore further, or we

7   need to modify that alternative so that we're not

8   having deleterious effects on other users or

9   goals.

10   Now, how do we do it? Well, Tom

11 already alluded to the fact that we are building a

12 hydraulic model. There is already one for the

13 Fields Point treatment plant, and we're building

14 one for the Bucklin Point treatment plant. And

15 that's sort of the tool that we use to do this.

16   It looks at both land use and how storm

17 water runs off and gets into the system and

18 overloads the system and then the hydraulic

19 capacity of the pipes and how the system operates

20 under storm conditions.

21   So probably the area that has advanced

22 most since the last time this went through the

23 planning process is in the area of green storm

24 water infrastructure. And in highly urbanized

25 areas like NBC's service areas, we tend to think

1   of sewer separation as a way to eliminate CSO

2   events.

3   But what we need to understand is that

4   anything that keeps storm water out of the closed

5   system amounts to sewer separation. You're

6   separating storm water from the waste water. So

7   green storm water infrastructure is an effective

8   tool to do just that.

9   Now, you might have heard of low impact

10   site development. Those same philosophies apply

11   here. The goal here is to eliminate water

12   pollution by reducing impervious cover,

13   increasing on site infiltration, eliminating

14   sources of contamination and removing pollutants

15   from storm water run-off. Typically these are

16   on-site endeavors.

17   So if you have a low impact

18   development, you incorporate these tools, be it

19   rain gardens or special types of soils, open

20   drainage, rain barrels, pervious pavement, those

21   types of things into your development.

22   Now, most of the Narragansett Bay

23   contributing area is already developed. So what

24   we would be looking at is ways to retrofit this

25   onto existing development, either during

 1 redevelopment or as an alternative to a grey

 2 project. You know, again, the sort of tools that

 3 we're looking at, rain barrels, rain gardens, or

 4 vegetated swales, sort of surface gardens that

 5 capture and reuse storm water, recognizing that

 6 not all of your area can be impervious or reuse

 7 the storm water that in some instances you need to

 8 infiltrate or create infiltration galleries for

 9 any water that hits impervious surfaces like roofs

10 or impervious pavement.

11   MR. NACENZI: Can I say something? You

12 know what, I wanted to say this before. Education

13 is the tool and prevention. What's lacking is the

14 public education. The actual person that lives in

15 the house is already developed. In other words,

16 something that should be mandated to communities,

17 educate the general public. Because once they

18 know what they need to do or what has to be done

19 to stop contributing to this storm water

20 infiltration into the sewer system and its

21 combined effects and what's the result of it,

22 people are going to prevent it a little bit and do

23 a little more. Are you following?

24   If a guy washes his car on a Saturday

25 with the hose, and people let the dogs go all over

 1   the place, fertilizers, whatever. But the point

 2   I'm trying to make is all this depends upon public

 3   education. There are -- people have to be

 4   educated on their level.

 5   MR. DOMENICA: Thank you. Question.

 6   FROM THE PANEL: If I could, if there

 7   were some incentive for an existing homeowner to

 8   engage in a system like that, I think that would

 9   be beneficial towards that per customer rate, give

10   them some sort of beneficial amount, percentage

11   off their utility billing, so to speak. That

12   would be beneficial.

13   MR. MARSHALL: One thing that I want to

14   note, since 2003 we've run under Tom's guidance, a

15   storm water reduction program so that when various

16   users come in, especially large institutional

17   users, they have been pointed in this direction

18   and encouraged and have embraced the concept.

19   And right now in a three-month storm we

20   avoid six and a half million gallons of flow going

21   into the existing system. That's about ten

22   percent of the effective capacity of the tunnel.

23   So just we are doing some of these things.

24   Now the concept is to expand it out to

25   other areas. Jamie has run rain barrel

1   distribution programs on a voluntarily basis for

2   people. So some of these are already in place,

3   but they can certainly be expanded.

4   MR. RAICHE: I guess it also makes

5   sense to mention that we have a sequence of

6   stakeholder meetings plotted out and goals for

7   each one of them. And GSI is the agenda in goal

8   for the third meeting that's -- this being the

9   first.

10   So I think my last slide -- okay. But

11 we will get into precisely these -- there's an

12 entire workshop dedicated to these sort of things,

13 although I appreciate the comments up front to

14 maybe seed those conversations.

15   Now, green storm water infrastructure

16 doesn't have to be solely on site or on private

17 properties. You can also incorporate it into the

18 right of way, you know, this same sort of

19 philosophies. Typically you think of medians for

20 sidewalk separation or anything in a parking lot,

21 the primary goal of that frankly has always been

22 traffic calming or traffic direction. These are

23 typically open areas that you can use to your

24 advantage to store and infiltrate storm water.

25   So as we already started to jump in

 1   here, adoption of GSI area wide would clearly have

 2   a large benefit, because if these small steps are

 3   done over the entire area, it relieves stress on

 4   the interceptors in the NBC system, but clearly a

 5   lot of that is outside the reach of the NBC to

 6   effect.

 7   And this is precisely why Sheila is

 8   working on this sort of thing with the Providence

 9   neighboring municipalities, to do this on a

10   regional level. That's the sort of thing we'll

11   talk about and hopefully get some data leading up

12   to and really focus on it with the third meeting.

13   Also, as I said, you can retrofit these

14   things into public ways, and we can use them as

15   alternatives to some of the hard pipe solutions.

16   So particularly in those sewer separation areas

17   that we pointed out where sewer separation is

18   extremely difficult, not that GSI is easy in those

19   areas, but the idea being that perhaps those are

20   discrete projects that NBC can take on in lieu of

21   hard pipe projects that would be under NBC's

22   control. Again, those are the ways we can look at

23   this.

24   That leads us into what are the grey

25   alternatives. If the GSI's are the source

 1   controls, the grey alternatives are -- really

 2   focus on the pathway receptor controls. As I

 3   said, if we're able to find discrete GSI projects

 4   that can be done in lieu of hard pipe projects,

 5   then the grey alternative is a smaller hard pipe

 6   contract. And that's sort of our first area of

 7   focus.

 8   The second area of focus is additional

 9   hydraulic areas of control in the system, talking

10   about hydro slides and bending weirs, that gives

11   us a higher degree of control of how flows are

12   controlled and distributed throughout the system.

13   Then reintroducing the idea of decentralized

14   storage, near surface storage, which is part of

15   the original plan before it was reengineered in

16   the 90's.

17   The idea here being obviously that CSO

18   events are a matter of timing. When the amount of

19   storm water getting into the system exceeds the

20   capacity of the pipes, that's when you have a CSO.

21   If you're able to provide temporary storage of

22   that volume and then release it back in, much like

23   the tunnel philosophy but on a more diffuse

24   manner, then you alleviate the CSO's.

25   Again, things like that, the hydraulic

 1 controls, the bending weirs, are critical in

 2 using these things. A bending weir would

 3 essentially keep flow in the main lines under

 4 normal conditions. And when the level rises in

 5 the pipe, the way the water flops over the bending

 6 weir and diverts the flow into the off line

 7 storage tank for pump out later.

 8   As we said, we want to keep the eye on

 9 what the goals are. The goals are water quality

10 in the bay. And we will be recalibrating the

11 original model, which again, gave us an idea of

12 what would happen. And obviously, that doesn't

13 exactly match with what has happened.

14   So we're taking the data in the

15 intervening years now that Phase I is online,

16 recalibrating the model, and using that to predict

17 or evaluate how Phase II has improved the system.

18 And we'll be using that then to evaluate various

19 Phase III alternatives, using the same pollutant

20 water quality goals that were set out in the

21 previous report, and running it against the new

22 alternatives.

23   Again, we've got into this a little

24 bit, but the primary measures that we're looking

25 at are shellfish and beach closures. You don't

 1   have to worry about jotting all this down. The

 2   presentation will be available on the website

 3   after, in case you want the numbers. And also,

 4   you know, as Caroline pointed out, the focus is on

 5   the bay is saltwater, but we also have the fresh

 6   water rivers to evaluate as well.

 7   So we use the water quality model along

 8   with the hydraulic model and the engineering

 9   alternative sort of in a cycle. So we developed

10   some engineering alternatives. What would they

11   look like?

12   We use the hydraulic model to predict

13   what the overflows look like. We use the water

14   quality model to apply the pollutant loadings to

15   those alternatives, run the receiving water body

16   model to determine what our water quality

17   resultant looks like. Is it attained, if yes,

18   then we have a successful alternative that we can

19   put in the mix to evaluate against each other.

20   If not, we have to go back to the

21   drawing board and reengineer the alternative and

22   rerun the hydraulic model and rerun the water

23   quality model to see if we have a technically

24   feasible alternative that we'll want to evaluate

25   against everything else.

1   All this is planned to be done in the

2   context of an integrated planning framework. As

3   you might have gleaned, the idea behind this is

4   that it coordinates different programs that

5   previously weren't. CSO programs, storm water

6   programs and sanitary improvements. I convinced

7   Tom -- into one the treatment plant and the

8   collection system.

9   We've successfully done this in

10   Baltimore. While the situation in Baltimore is

11   different from this one, it does have sort of an

12   overarching theme that demonstrates the success of

13   the IPF. The IPF process was able to make the

14   argument for stretching out the compliance

15   deadline.

16   With the consent order that Baltimore

17   originally had, they were going above their

18   financial capacity, above their affordability

19   criteria. We were able to make the argument that

20   we need to extend the compliance deadline to stay

21   under the affordability criteria. By blending in

22   the CSO storm water and sanitary needs, they also

23   used drinking water.

24   They came up with a much more balanced

25   CIP plan. Whereas the consent order was driving

1   everything on the wastewater side, and the storm

2   water and water were lagging behind, they were

3   able to make the argument that they needed a more

4   balanced approach.

5   And part of the IPF process also

6   evaluates what the costs and benefits of the

7   various different projects are. The idea is to

8   sequence the projects so that you're front loading

9   the benefits.

10   Now, a basic tenet or a basic

11 assumption is that any program is made up of

12 discrete projects. And the discrete project sort

13 of follows this cost curve that anytime you're

14 addressing a problem, there are sort of low

15 hanging fruit. There are high priority projects

16 that will get you a lot of benefit for relatively

17 low cost.

18   The further you go along in a program,

19 you're spending more money and getting diminishing

20 returns. Previously without IPF you would have

21 external drivers, consent orders, permits, and

22 then other stuff that you just need to do. That

23 would force the sequencing. That would drive what

24 projects get priority.

25   And unfortunately, what would end up

         1   happening is you're running out that sort of cost

         2   curve to the diminishing returns on each one of

         3   those different programs before starting the next.

         4   The concept is that by taking the integrated

         5   approach and putting all of those programs into

         6   the mix and evaluating their benefits, you pick

         7   the low hanging fruit off of the different

         8   programs first before running out your cost curve

         9   and spending a lot of money on the smaller

        10   incremental improvements.

        11   The other tenet being that there is

        12   significant overlap between the programs. CSO and

        13   storm water improvements both do a lot to improve

        14   water quality in water bodies. So the process

        15   starts out with a group like you guys helping us

        16   to identify a whole bunch of different projects,

        17   projects that are beyond the scope necessarily of

        18   NBC is going to execute but will have water

        19   quality benefits.

        20   Moreover, they will be relying on the

        21   same rate payers, citizens, to fund them. That is

        22   a large part of what we'll be doing in -- well, in

        23   our off line meetings, some of which we've already

        24   started having with local BW's. And then as we

        25   advance through the process, we want to fill up

         1   the top of the funnel with a whole bunch of other

         2   projects that the same rate payers will pay for

         3   and will have similar benefits. So we will then

         4   come up with comprehensive project lists and rate

         5   them.

         6   So in the past, programs like this,

         7   planning efforts like this, really focused on

         8   costs and benefits, cost being how much would the

         9   capital investment be to construct it and what are

        10   the long-term O&M costs, and the benefits, in this

        11   case, what are the water quality improvements.

        12   The proponents of -- expanding that to

        13   include social criteria. The idea being that if

        14   you, as we had done previously, if you're only

        15   looking at environmental benefits and economic

        16   benefits, sure, you come up with a bunch of things

        17   that are viable. But if you add a social

        18   criteria, for example, things that add importance

        19   to you, open space or quality of life, add a

        20   social dimension, you are able to identify

        21   projects that are bearable to the rate payers and

        22   residents, are equitable, and in ideal cases,

        23   sustainable.

        24   In the case of Baltimore, they had

        25   something like 21 criteria by which they evaluated

         1   the projects. I'm not suggesting in any way that

         2   we should come up with 21 criteria, but it's a

         3   possibility. The experience in Baltimore, Lima,

         4   Springfield water sewage, has helped us develop a

         5   process for this.

         6   This is going to be a large part of

         7   meetings four and five to step through this

         8   process, both with the NBC Phase III pieces and

         9   also any other storm water improvements or

        10   sanitary improvements that we throw into the

        11   hopper.

        12   And again, a large part of it is the

        13   affordability piece. In Baltimore, there were --

        14   already affordability issues, and if they

        15   continued under the sort of business as usual sort

        16   of model, without doing the financial analysis, it

        17   would become unaffordable for the entire city.

        18   As Tom indicated, there's -- the two

        19   percent thing is something that we talk about.

        20   It's slightly more complicated than that, and

        21   luckily Greg is here, and once I wrap up, we'll

        22   open it to questions. And I would encourage

        23   everyone to pepper Greg with questions at this

        24   one.

        25   But the focus of the next two meetings

1   is sort of the nuts and bolts engineering. And

2   Greg won't be here. So we'll beat up on Greg

3   today since he is here.

4   But the concept is that there's two

5   indicators that the EPA uses in their guidance, a

6   residential indicator that's intended to represent

7   the burden on the rate payers and a financial

8   capacity indicator that looks more at who is

9   executing the project, you know, the municipality,

10   or in this case, the Commission that represents

11   the capacity of the municipality to take on that

12   financial burden.

13   Just taking a simplistic view of it, if

14   you look only at Providence and no other cities,

15   for example, if we did a simple calculation, it

16   looks as though the program is affordable for the

17   residents of Providence. However, that simplistic

18   approach fails to view or take into consideration

19   a lot of the complexity that goes into these

20   projects.

21   And currently the U.S. Council of

22   Mayors and APWA and others are working with EPA to

23   redefine what the affordability criteria is. And

24   our approach sort of anticipates a lot of those

25   changes and what works in a lot more level of

1   detail.

2   The problem with that simple indicator

3   is that it ignores and doesn't take into

4   consideration the distribution of income between

5   neighborhoods. And the difference in income

6   distribution is a huge factor that impacts in

7   neighborhoods different.   So a two percent

8   utility burden for a utility district as a whole

9   doesn't take into account the distribution of

10   income.

11   And we're not even just talking from a

12   city and city or town to town, but neighborhood to

13   neighborhood. Because the details do matter.

14   The -- how the wealth is spread around across the

15   different districts within the city and

16   Providence, has sort of a steeper curve than even

17   the national average.

18   So what Greg's group does is build a

19   set of financial models. You know, we have the

20   hydraulic model and water quality model and

21   financial model so that as we're cranking through

22   the alternatives, we can see how affordable the

23   sweeter scenarios are.

24   So again, if you just look at a

25   simplistic level, it tends to indicate that the

 1 program is affordable. But once you break it down

 2 to a more finite level, you find that it isn't

 3 affordable for the vast majority of districts.

 4 Again, the --

 5   MS. KARP: That's based on median

 6 household income, correct?

 7   MR. RAICHE: Yes.

 8   MS. KARP: It's not based on

 9 homeowners, is the value of a property --

10   MR. RAICHE: That is still and will

11 continue to be the EPA.

12   MS. KARP: We have the ability -- we

13 actually have a Providence plan available. We

14 have the ability to look at the difference between

15 median household income, average household income,

16 and income for property owners in these poor

17 districts.

18   MR. RAICHE: Let me step through this,

19 and then we can get into some of the details of

20 our experts, including Greg. And you can beat up

21 on Greg for an hour and a half, if you want.

22   Again, we went through a broad brush of

23 all the things we'll be discussing. Hey, that's

24 today. So we can cross that off the list.

25 Meeting number two on Thursday, April 10th, there

1   was a mistake in the agenda. It's Thursday, April

2   10th. The focus of that will be to look at the

3   grey alternatives.

4   Meeting number three, May 22nd, and

5   again this will be posted on the website if you

6   want to download it later. And there's more

7   description in the handout notes that will focus

8   on the green alternatives. And I expect everyone

9   to be very excited about that.

10   In June we'll really start the IPF

11   process. The idea being that focusing early on on

12   the engineering side, we'll be able to start

13   filling the top of the hopper.

14   And in June and September we'll really

15   crank through the IPF process. By October, we

16   hope to have a good portion of the plan locked

17   down. And then I use the October meeting to

18   refine the recommendation of the plan.

19   MR. DOMENICA: Thank you, Rich.

20   Questions? Not just on affordability but really

21   anything that Rich covered.

22   MS. DORMODY: Let's start with

23   affordability.

24   MR. DOMENICA: If you could stand.

25   MS. DORMODY: Sheila Dormody with the

1   city of Providence. And you were the first person

2   asking. So I think affordability is obviously a

3   big concern for us, especially as we're talking

4   about doing this work, and perhaps the storm water

5   utility and combined impact. So any other number

6   of things that are happening are significant,

7   Providence water rates going up at the same time.

8   Do you have any good models from other

9   places of how you've been able to adjust for the

10   most impacted communities or neighborhoods or

11   households? Because we have a real diversity of

12   income in the service area for NBC.

13   MR. BARD: Let me answer that in a

14   couple different ways. First of all, the NWA's

15   approach -- we talked about the EPA's 1997

16   approach, where we looked at the residential

17   indicator. And they look at some other financial

18   capabilities of that municipality or that

19   district.

20   The approach that we're working with,

21   the U.S. Mayors Water Council and Conference of

22   Mayors is essentially going into greater

23   granularity. And what we are actually doing,

24   besides building a financial model to understand

25   revenues and rates and debt coverage and all of

1 the different costs in that model that we then

2 import in different CNP scenarios to see what the

3 impact is over the next 20, 30 years, we also

4 developed another affordability model that ports

5 in all of the billing data. So we know exactly

6 what the historical bills are for -- for all those

7 individual homes.

8   For the cost data we're using the

9 census track data. And we're pulling all of that

10 in. That census track data has the distribution

11 of income spread out for each census track. So

12 what we're doing is using an average cost to marry

13 up the individual bills contained within that

14 census track cast against the income distribution

15 of that census track.

16   And that starts helping us understand

17 by census track and at that income distribution

18 level what those different impacts are over the

19 course of time as rates increase.

20   And so what we're seeing here is not

21 just necessarily, hey, two percent for NBC as a

22 whole. We can now go in, because we know that

23 almost any census track there's some lower income

24 levels that are tremendously impacted, and we're

25 seeing that's not even two percent, but that's at

     1   five or even ten percent.

     2   And as rates are kind of increased over

     3   five, ten, 15, 20 year period, that actually

     4   spreads, and nothing usually ever gets better. So

     5   just up here, you can kind of see where there's

     6   yellow and green and different things like that.

     7   Those green areas on average that would say that

     8   that census track is above two percent, but you

     9   could actually drill down further. And you would

    10   say, in those first few income brackets, there's

    11   an affordability issue there.

    12   So first of all, I wanted to let

    13   everybody know here's the level of granularity

    14   we're looking at beyond what the EPA 1997 document

    15   is actually offering. And I would like -- I like

    16   some of the other comments given the data that you

    17   have, yeah, there's census track data that offers

    18   property values, and you can pull that off of the

    19   county records and different things.

    20   On that, I haven't seen where -- it's

    21   not wildly accepted at this point to be able to

    22   take billing data and cost data and do the ratio

    23   against actual property values. So that's where

    24   we have been focusing on the income level.

    25   Now, to go back and answer kind of the

 1   second part of your question on affordability,

 2   you're right. It's the biggest concern. And

 3   there's different ways -- and you have to realize

 4   that one part of this is we need to really analyze

 5   and look at the affordability. It's not just the

 6   city of Providence. This is going to include all

 7   of the 15 communities also as part of that effort.

 8   Now, we then have to -- sometimes we get a

 9   question, and it's actually on a rate

10   implementation issue. So that's kind of a

11   separate issue than this analysis.

12   And I think maybe the second part of

13   the question is, depending on how you're actually

14   going to develop or implement your rates, then

15   there's different types of models or types of

16   things to offer.

17   So if you need -- if you're doing a

18   storm drain rate for a storm drain utility,

19   whatever the mix is, that's where you're

20   developing again the impervious data but also

21   educational credits for the schools and other

22   types of on site mitigation. And you're

23   developing a credit program to try to help people

24   give them some ability to offset some of those

25   affordability impacts.

 1   So that's where there's this process

 2 and then kind of the rate implementation piece.

 3   Did that answer your question?

 4   MS. DORMODY: I'm wondering if there

 5 are other models out there, a utility that created

 6 a life line rate for these types of services or

 7 some --

 8   MR. BARD: Right. Every utility given

 9 these different types of constraints, the AWWA,

10 they basically say, hey, any place there's always

11 going to be those demographics that are going to

12 need help. Internal to your policies as well as

13 state law, then that's where you can actually

14 implement low income and life line and other types

15 of programs.

16   But kind of as a financial guy, I also

17 say you want to basically be able to know what

18 those different impacts are and -- because you

19 could be -- subsidize issues could essentially

20 occur. But as long as those are adopted policies

21 within the utility, then they can do it. There's

22 a number of different programs like that that can

23 be implemented to watch out for. Are you looking

24 at senior citizens on fixed income, disabled or

25 low income, and there's different programs

 1   appropriate to target those.

 2   MR. DOMENICA: A question right there.

 3   MS. DORMODY: My point is, obviously,

 4   but it's plausible that our rate base as a whole

 5   could withstand the cost of the program like this,

 6   but many property owners within that rate base

 7   would not be able to withstand those costs. And I

 8   think knowing that granular data, it's very cool,

 9   will help to inform what we think is okay this is

10   okay.

11   MR. BARD: You're right. This data

12   gives the policy makers the ability to say what

13   are the abilities to say what are those impacts

14   and the fact we are looking at all the customer

15   bills --

16   MR. DOMENICA: To the right.

17   MR. WALKER: Mike Walker, commerce RI.

18   It's nice that you do this by the census track,

19   but what are you doing as it relates to the

20   business community and industrial and commercial

21   users and what the rate impact is and has been in

22   the past and what the profile looks like for the

23   cost.

24   Right now, as I look at the tariff,

25   every homeowner, $500, by the time you do the

1   meter charge and you haven't pumped a gallon

2   through, unless you have the smallest pump, you

3   already exceeded it. So are you going to be doing

4   a sensitivity as you look at different scenarios

5   that look at where the rate would land on a

6   commercial and industrial sector and benchmark it

7   against our other neighbors and look at

8   competitiveness before coming forward with some

9   recommendations.

10   MR. BARD: Very good question. This is

11   actually one of the issues at the heart of what

12   U.S. Mayors is basically taking to the EPA. And

13   on March 27th, we're presenting to the Mayors

14   Council and talking about these issues.

15   The current EPA 1997 guidance only

16   focuses on the residential indicator. They do not

17   have any discussion as it relates to where the

18   different financial impacts or metrics on

19   businesses, on commercial customers and on the

20   industrial base. We see that that's one of the

21   weaknesses of the 1997 guidance methodology, as

22   you can see, where it's kind of a residential

23   indicator.

24   We can discuss potentially different

25   issues, for these other financial capabilities,

1 for bond rating and net debt property value and

2 some of these capture a portion of the impacts to

3 the commercial side, but really not in its

4 entirety. So this is one of the -- those ongoing

5 discussions on that.

6   Now, because we're dealing with

7 individual customer bills, and given the scope of

8 this, and putting it in line with the EPA's

9 methodology and then enhancing it, the current

10 scope and budget that's been discussed with me

11 only really focuses on kind of the residential

12 factor and kind of rolling these things up against

13 the median household income.

14   So that saying, the commercial impact

15 would probably need to be a separate analysis or

16 body of work, but I would still say is very, you

17 know, could be very critical or could be an

18 important community value for this. That's

19 something that this policy group would need to

20 make that determination.

21   MR. DOMENICA: Jan, do you have a

22 question?

23   MR. REITSMA: Jan Reitsma with the

24 governor's office. My question was going to focus

25 on the rate implementation aspect of it. I think

1 it's really great that we're going to have more

2 granularity on the problem statement, but I think

3 it would be very helpful for this group to get as

4 much information as possible on whether there are

5 examples out there where solutions are being tried

6 out to come up with answers with.

7   So how do you come up with a system

8 that can be administered without collapsing under

9 its own weight of complexity and yet be fair? Do

10 we have to look beyond the borders of this

11 country? I don't know.

12   I'm very interested in how things went

13 in Baltimore, for example, because I think there's

14 some similarities there. But how do you do that?

15 And that's just as important as the more

16 sophisticated analysis of the impact.

17   MR. BARD: And that's where I would

18 like to draw on the experiences that I have had.

19 I've been a municipal financial officer in charge

20 of the charge -- I've been a chief financial for

21 Colorado's third largest facility. I'm on the

22 rates and fees and affordability and asset

23 management committees for AWWA as well as in the

24 government financial officers association over at

25 Capital Planning for the U.S. and Canada.

1   And over the last few years, because of

2   those exact issues that you have just raised,

3   there has been a number of different studies in

4   publications, some of which I've been involved

5   with, that talk about what the best practices that

6   are out there for rate implementation to

7   accommodate some of the affordability issues.

8   We all understand that just because it

9   doesn't look like we can forward with it that

10 doesn't usually get us off the hook. Therefore,

11 as we go forward and we prioritize and optimize,

12 how we can afford how we mitigate some of those

13 affordability issues.

14   That's where there's a number of

15 different programs that are itemized. And I'm

16 more than capable of bringing some of those

17 different items for policy consideration and

18 providing that to this group.

19   MR. MARSHALL: I think it sounds to me

20 like a question for subsequent affordability

21 workshops. And it seems to me it's boiling down

22 to, are there real life applications in specific

23 cities where they have done this and how have they

24 done it. So that seems like a question that will

25 keep coming up.

         1   MR. BARD: And you're right, you

         2   start -- you do this analysis, you analyze the

         3   different CI pump stations, and you kind of cast

         4   out and say, what's the cost, what's the impact.

         5   You know, you have to maintain the viability for

         6   the financials for NBC.

         7   And then you end up moving to another

         8   stage saying, okay, if this is what we're saying,

         9   we're going to move forward with -- to meet all of

        10   the different water quality control issues now,

        11   then that usually kicks into, well, now what do we

        12   need to do? There's the education, the analysis,

        13   all these different program options that you can

        14   use.

        15   That evidence is there. It is in the

        16   U.S., so that's good.

        17   MR. DOMENICA: Carol, your turn.

        18   MS. KARP: I actually have a kind of

        19   major comment, but I want to clarify one thing.

        20   I'll ask, are the wastewater treatment rates or

        21   the Bay Commission rates pegged against water

        22   rates or is there a separate meter, and I think I

        23   want the answer, I'm asking a question, I know

        24   the -- I'm guessing wastewater is pegged against

        25   water, and our consumption basically determines

 1   the sewer rate. So in fact, water is a really

 2   important resource, but that we really ought to be

 3   protecting it.

 4   So in fact, all those presentations

 5   focus on the wastewater, but instead, we really

 6   probably ought to be looking at water which is --

 7   it's based on a particular address, address uses

 8   water and then -- why is this analysis about

 9   affordability, it has to be based on the address,

10   has to be based on the value of the property

11   that's using the water.

12   And then I wanted to go back to the

13   source pathway receptor model. It's the same

14   issue. If you think of water as being part of a

15   pollutant, then we're going to think of all the

16   soft solutions to soft engineering approaches to

17   deal with this pollutant source. We'll deal with

18   expensive hard solutions like tunnels. If you

19   don't think of water that way, if you think of it

20   as a valuable resource in fact should never enter

21   into wastewater system if at all possible until we

22   capture rain water which is not yet contaminated,

23   and we figure out how to bank it and infiltrate

24   back into the system so we use it as a valuable --

25   instead of the tunnels. This should be a last

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 1   resort.
 2              So to the extent we catch and keep it
 3   out of the -- and you start billing people for
 4   what they use for water, and that brings in
 5   commercial and industrial users, there should be
 6   an incentive to use less water.  That's me.
 7              MR. DOMENICA:  I think that's the core
 8   of the source pathways receptor approach is to do
 9   what you can at the front end, at the source end,
10   and go forward.
11              MS. KARP:  That way you are -- don't
12   have to charge users very much money, because it's
13   the sort of the New York City water filtration
14   argument.  The water never gets thought of as a
15   waste, wasted resource; it gets thought of as a
16   beneficial resource, and it's going to go back
17   into the drinking waters.  And then you get
18   your -- everybody in the water supply district
19   contributes to that.
20              Right now we're delivering water to
21   east bay.  Maybe it goes in the reverse direction.
22   So water gets backed in reservoirs over there.
23   But I don't think we should be talking about
24   costing out expensive systems before you get the
25   basic program thought about or the goals thought
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 1   about.

 2   If I may say one last thing.

 3   There's -- this occurs in a watershed, so you have

 4   to have the boundaries of the whole project. You

 5   can't look at any commission -- just as a box

 6   here. There's everything that comes into the

 7   Blackstone River above BVDC. That's going to

 8   affect water, water quality downstream.

 9   So I think it's kind of dangerous to

10   cost out what the Bay Commission has to spend to

11   address these sources, these overflows, without

12   looking at what Worcester is putting in,

13   Woonsocket is putting in and so on. It's

14   dangerous for us to do that, Bay Commission.

15   MR. DOMENICA: Very good. Other

16   comments or questions?

17   FROM THE PANEL: I assume you're

18   contractors with NBC?

19   MR. BARD: Correct.

20   MR. GALEN: What is your responsibility

21   to use the data to evaluate and over a period of

22   time to come up with firm recommendations to this

23   committee to act upon? Since you're contractors

24   with NBC, what is your responsibility to evaluate

25   all this data within a certain period of time to

1   come out with firm recommendations to this

2   committee on which to act upon?

3   MR. RAICHE: The primary focus is to

4   redefine what NBC has to do for the bay. It's

5   interesting that that question brings up what

6   Worcester and woonsocket are doing for the bay.

7   In terms of our water quality test, we

8   are incorporating those sort of things. There are

9   various questions we need to answer along the way,

10 and those are in the mix.

11   Ultimately, what it is that we need to

12 recommend is what it is that NBC will do with its

13 systems and what Phase III will look like. We're

14 using the IPF to expand that analysis, again,

15 recognizing that there are various other projects

16 that the same rate payers are going to be paying

17 for similar water benefits.

18   But ultimately, a lot of those are out

19 of NBC's control. We're putting it into the

20 evaluation mix that we have a much broader

21 understanding of everything that's going to take

22 place in the region.

23   MR. BARD: To answer that again on the

24 financial component, we want to basically be able

25 to develop a model. So this group says, here's

1 the defined amount of CIP's as these estimated

2 costs for these different scenarios, what are the

3 different affordability impacts, how does that

4 align to the EPA's 1997 model, and how does it

5 actually play out into the next 20, 30 years of

6 the affordability model.

7 That gives us the ability to basically

8 come back and say, here are the impacts. So not

9 only can you see the financial model as far as the

10 projected rate increases, but also the

11 affordability impacts. And we could drill down

12 the granularity level. And then that information

13 is actually packaged up into a final report or

14 recommendation.

15 But the good thing is all of those

16 things are established. It really becomes maybe a

17 baseline component if you needed to look at larger

18 implementation issues such as regionalization or

19 other things. This could be a core piece.

20 FROM THE PANEL: They came up with

21 proposal A with so many millions, is that your

22 responsibility --

23 MR. RAICHE: Could you repeat the

24 question?

25 FROM THE PANEL: The previous

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 1   stakeholder, Phase I and II, came up with profile

 2   A, B, and C and D.  Is that your final

 3   responsibility to come up with costs for

 4   proposals?

 5              MS. KARP:  For all alternatives A, B, C

 6   D?

 7              MR. RAICHE:  Yes.

 8              FROM THE PANEL:  It is?

 9              MR. BARD:  Yes.  It's what's the

10   project, what's the cost, that CIP component gets

11   put into the financial model.  Then the results of

12   that go into the affordability model.

13              FROM THE PANEL:  Do you have a time

14   limit on what you're supposed to come up with

15   that?

16              MR. RAICHE:  We have a goal to wrap up

17   our mission here with the stakeholder group and

18   develop the recommendations to get right for

19   approval for this year.

20              MR. LIBERTI:  Angelo Liberti. Yeah, I

21   guess I would sort of, trying to clarify in my

22   mind, it was my understanding the affordability

23   guidance always has had two major components:

24   Calculating a percentage of median household

25   income as a rough guide, not a carved in stone
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 1 requirement, but a way to ensure some degree of

 2 consistency across the nation. And then it talked

 3 about other drivers or factors and high

 4 unemployment, high property taxes.

 5   MR. RAICHE: You're going along the

 6 list.

 7   MR. LIBERTI: It seemed like in the past

 8 those things were to argue that maybe a 1.2

 9 percent is the right target because these other

10 factors are high. Is it switching now so that

11 more of those factors go into the calculation of

12 the percentage in the first place, or are they

13 just getting sort of more examples?

14   And it's sort of six of one, half dozen

15 another, I realize, but I'm trying to figure out

16 how new this -- I think in the past NBC attempted

17 to look at things like unemployment. This issue

18 of property owner I believe came up last time.

19 And it can be considered, if you choose to

20 consider it, after you do this. I'm just trying

21 to I guess get my mind around what goes inside the

22 percentage calculation and what's an external

23 nebulous kind of --

24   MR. BARD: Right. Going back to the

25 EPA methodology from 1997 that's up here, a lot of

     1   this was really kind of simple calculations. You

     2   do the work. You go through the different

     3   formulas. The hard part is more or less gathering

     4   up all the data, interpreting that data, and

     5   putting it into the model.

     6   And this was used supposedly as the

     7   EPA's general guidelines for consistencies across

     8   the U.S. And it was typically used as, once

     9   again, a guidance component. But a lot of times

    10   in different EPA regions, it became something more

    11   static saying, you know, we're only going to

    12   consider, you know, going to 20 years if you're

    13   above the two percent.

    14   And so by having those guidelines in

    15   place, over time it seemed to in different regions

    16   become interpreted as being more rigid. And as

    17   the EPA went and said, hey, of the 772 communities

    18   across the U.S. that have severe issues on

    19   combined sewer overflows, we're going to crack

    20   down on you, and here's what we have. And that's

    21   really, you know, created some of the push back

    22   saying, wait a minute, this doesn't necessarily

    23   capture all of the different elements that are

    24   occurring in our municipality.

    25   So there has been, you know, I think a

 1   number of different discussions and some changes

 2   in people's perception of affordability.

 3   The downturn of the economy by itself

 4   had a major impact. And that's where even against

 5   household income against property values you saw

 6   household income drop drastically and property

 7   values also fluctuating. And even that, as a

 8   standard metric, even with the downturn in the

 9   economy, it wasn't necessarily something that

10   seemed to be a good forecast tool at a certain

11   certain point in time.

12   So we can look at not just the

13   residential indicator. We can draw on all of the

14   different strengths and weaknesses, but it's at a

15   high simple average type of calculation, and these

16   that's where a number of different groups are

17   trying to say it's more complex than that. How

18   can we really have our fair story be told. And

19   how can we use that to try to sit down and have

20   discussions to say what should our cost be and

21   what can we achieve over what type of time frame.

22   And those are the new discussions that are

23   changing.

24   But otherwise, all of these elements

25   are basically going to be analyzed, as well as the

      1   affordability piece.

      2   Now, NBC, we've been gathering up all

      3   their financial data, their billing data. One of

      4   the next steps we're going to need, because it's

      5   just not about NBC on this analysis. We need to

      6   have some of the other financial information for

      7   each of the other communities so that we can try

      8   to capture a snapshot for the baseline financial

      9   plan of this, is kind of what all the different

     10   costs are associated with these different

     11   programs.

     12   So that's one of the things as we

     13   identified for you. And now you know who I am.

     14   I'm going to be looking for those finance

     15   directors, finance managers and the public work

     16   people to find out how much are you really

     17   spending on your side of the system so I can try

     18   to calculate some of those costs going forward,

     19   understanding that what isn't being done and what

     20   asset management work and different things haven't

     21   been done, that's usually a gap on some of those

     22   different issues.

     23   To address one other point, even if

     24   this IP, integrated planning framework, had water,

     25   sewer, and storm, you know, as a complete

        1   component, the body of of work that you're looking

        2   at specifically for NBC's functionality that we

        3   just discussed here still would have to all be

        4   taking place, including what the different CIP

        5   scenarios are and grey infrastructure and green

        6   infrastructure and all those different scenarios.

        7   That would still be one component, if you look at

        8   both water and sewer and storm.

        9   And one of the elements that we always

       10   have to remember doing, say, conservation is that

       11   any impact on sewer actually does -- or impact on

       12   water usage does have an impact onto the flow cost

       13   component for sewer too.

       14   So on that effect, those are

       15   integrated. But this body of work still is

       16   important as a stand-alone piece.

       17   MR. DOMENICA: Thank you. What you're

       18   saying, if you conserve water, the rates could go

       19   down, the revenue goes down, but the costs on the

       20   Clean Water Act side could stay the same.

       21   MR. BARD: Exactly.

       22   MR. DOMENICA: That's a challenge.

       23   MS. KARP: That's a perverse incentive.

       24   MS. DORMODY: So we are A decision

       25   making group or advisory group to help inform NBC

 1   if it gets referred to DEM for a final approval?

 2   Tell me more about exactly what that --

 3   MR. DOMENICA: I will let Tom.

 4   MR. BRUECKNER: The last time we had

 5   stakeholders we had a unanimous decision with what

 6   we should go forward with. The only objectives

 7   where were the.

 8   FROM THE FLOOR: I can't hear.

 9   MR. BRUECKNER: The last time we had

10   the stakeholders, we basically, when we finished,

11   after educating people as to what the requirements

12   were and what we were proposing, I would say there

13   was unanimous -- near unanimous agreement as to

14   what we should do, that the alternative we

15   selected made sense.

16   As I mentioned, I think it was only the

17   industrial users from one group who represented at

18   the stakeholders meeting who objected saying they

19   thought the rate increases were too great. We're

20   now at the point where we recognize that rates are

21   a very, very important factor going forward.

22   And what we would like to do, because

23   we have we feel there is a diversity of people of

24   the stakeholders representing different groups,

25   the municipalities representing industrial users,

 1   chambers of commerce, what we'll call

 2   environmental groups, governmental agencies,

 3   regulators, to try and come up with a plan that we

 4   think we can go forward with that is affordable.

 5   We're not going to take a vote at the

 6   end and say, this is the plan, but we do want to

 7   get feedback from you during the meetings as to

 8   what are your concerns about the plan going

 9   forward.

10   Certainly one of our concerns which we

11   already expressed, and we're the stakeholders, is

12   the cost of the program. There are other issues

13   such as water quality. You still want to attain

14   water quality.

15   There's the issue of what the

16   regulators will require us to do. In the end, we

17   may not have a lot of choice, because we are

18   mandated to do certain things. So I would say you

19   certainly are an advisory group to tell us what

20   your concerns are. I think you also bring to the

21   table some information that may be helpful to us

22   in understanding what we need to do and what your

23   concerns are.

24   So my goal would be that when we're

25   done, we can all pretty much agree that the plan

1   that we came up with really is the best, given all

2   the constraints that we have to deal with.

3   So I guess it would be the same as we

4   did the first stakeholder. And Brian Bishop isn't

5   here, but I remember Brian, the first set of

6   stakeholders was very vocal. He had some strong

7   opinions, one of which was he thought the program

8   was a terrible idea. But when we went through,

9   and I don't want to speak for Brian, but the sense

10   I got at the end is Brian understood what we were

11   trying to and what we had to do. And what we came

12   up with was probably a good compromise to achieve

13   what we had to.

14   One of the big problems with the first

15   evaluation obviously was the cost estimates. They

16   were way below what it really cost us to do this

17   work, which has driven the rates much higher and

18   has put us in this position of what is affordable.

19   And as I mentioned in one of my slides, that's one

20   of the things the EPA says, keep spending money

21   until you can't afford to spend anymore.

22   What is that? And when you're done

23   spending that money that you could afford later

24   on, when you can afford more, then spend more

25   money.

 1   So right now today, what is it we're

 2   supposed to be spending and what can we get for

 3   that money that we're required to do.

 4   MR. DOMENICA: I think it does in many

 5   respects, the S curve that Rich put up captures

 6   it. There's a certain amount of money you have to

 7   spend to get any improvement. Then you get a

 8   pretty good return on your investment as you go up

 9   that curve, but at someplace it levels off.

10   And you can spend vast amounts of money

11   for very small incremental benefits. We need to

12   figure out from NBC's point of view, in terms of

13   Phase III, where we are on that curve. Find that

14   optimal place.

15   FROM THE FLOOR: I think the thing I

16   want to point out, and that is when we look at the

17   affordability, although it is an affordability for

18   NBC, it really is the affordability for the people

19   who live within the district. It's not just us

20   they have to pay. They have to pay taxes, because

21   they have these other program requirements related

22   to water quality that are going to be heaped on

23   top of our rates.

24   So when we look at affordability, we

25   want to include that as well. That's why we did

 1   sewage infrastructure. And we want to look at

 2   storm water as an issue that Providence would you

 3   say can forward.

 4   MS. DORMODY: We care about you getting

 5   the right answers.

 6   MR. MARSHALL: If I can just add on to

 7   what Mike just said. It's not where on the curve

 8   we should be and how much. Let's say it's $400

 9   million, to pick a number. It's when do we spend

10   that money. It's not different than when we look

11   at the homes and say, I need to redo the bedroom,

12   the kitchen needs a new roof, new furnace, and you

13   come up with a list. And clearly there's probably

14   very few of us who can do all those things at one

15   time or within four or five years.

16   So you start thinking, okay, how do I

17   spread it out. And that's what we want this

18   process to be about. We're not saying we won't

19   spend the money. It's a matter of maybe, when we

20   spend the money. It's about whether the rate

21   payers can pay the bills.

22   MR. HOLMES: I need a new roof. I want

23   a new bedroom. There's a difference between needs

24   and wants. And that's part of what we need to

25   figure out. What do we need to do and what do we

1   want to make happen. There's a lot of benefits to

2   this other than, yeah, the water is clean. You

3   know, that's yeah, the water is clean. Yeah, the

4   water is clean enough to gain more shellfishing

5   grounds. The water is clean enough that fisheries

6   come back.

7   If Rhode Island had the Atlantic salmon

8   fishery it had 300 years ago, there would be zero

9   unemployment in Rhode Island. Because that

10   fishery was big enough that -- I mean, it was an

11   unbelievably wealthy industry.

12   We don't have it anymore because we

13   dammed up the rivers and made a mess out of

14   everything. So they are all gone. There aren't

15   any. You can't find salmon in Rhode Island. But

16   if we tore the dams and cleaned up the water and

17   cleaned up and the fishery came back, you watch

18   the state go up and its welfare and its

19   affordability and its, you know, jobs and all the

20   rest of that stuff.

21   It could be an enormous economic

22   engine. But it's totally overlooked. And that's

23   a shame, because we're looking at this, and I get

24   it. The affordability. And I got a house. I got

25   to pay the sewer rates. I got to do all that

1   other stuff.

2   But if I had my choice to go back

3   fishing as opposed to working at a yacht club, I

4   would go back fishing tomorrow. But because the

5   fisheries have declined, a lot of fishermen who

6   want to be fishing are doing other things.

7   But the future, if we clean up the bay

8   is mind boggling. If we clean up the rivers and

9   streams and all the other stuff that we can take

10   care of, the future is mind boggling. And that's

11   what I'm here to speak on. Because I've lived

12   here all my life, and I love it.

13   MR. DOMENICA: Last comment.

14   MR. REITSMA: I'm glad Phil said what he

15   said, because it's a positive thing. I think it's

16   important for us to keep in mind it's what it's

17   about. It should be a positive thing.

18   I have a bit of a problem with only

19   focusing and characterizing things in a negative

20   way. I know for a fact that there are people at

21   EPA that are not about spend some more money and

22   then weigh them when you have money again, spend

23   more money.

24   That's not the way it is, Tom. The

25   people at EPA are all for innovation, come up with

 1   new ways of doing what needs to be done. That's

 2   what we should be focusing on. We have a lot of

 3   people in this room who have a lot of capability

 4   to come up with new ideas and new ways to work

 5   together to come up with solutions, hopefully that

 6   can save us money and achieve the outcomes like

 7   the ones Phil is talking about.

 8   And I think that's how we need to

 9   approach this. Because I don't want to discount

10   the difficulty, both the financial difficulty, the

11   technical difficulty, all those things, but I

12   think there are new ways of doing things, and we

13   ought to empower the people proposing those.

14   Like what's being tried in Providence

15   and surrounding communities. If we focus on that

16   and we try to tap that talent that is either in

17   this room or we have access to, I have a feeling

18   we may come up with solutions. I think we have a

19   talented consulting team. If we focus on that and

20   the spirit in this room is really positive, we

21   might be surprised with what we come up with.

22   MR. DOMENICA: Thank you. Thank you to

23   everybody else. Great opening session.

24   MR. BRUECKNER: Just one comment. Next

25   meeting is Thursday, April 10, 1:00 p.m. You

1   notice the meetings after that are at 9:00 and the

2   other, there is a record that we have the

3   stenographer. When we get it, we'll put it on the

4   website. Thank you.

5   (The meeting concluded at 4:03 p.m.)

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1   CERTIFICATE OF REPORTER

2

3   I Hereby certify that the foregoing pages

4   are a complete and accurate computer-aided

5   transcription of my original stenotype notes taken

6   in the Matter of NBC STAKEHOLDERS GROUP, which was

7   held at Narragansett Bay Commission, One Service

8   Road, Providence, Rhode Island, on March 12, 2014.

9   Signed this 1st day of April, 2014.

10

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16   _____

17   Margaret R. Golden, RPR

18   Notary Public

19

20

21   My commission expires: October 14, 2015

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