CITY OF PHILADELPHIA
SINKING FUNDS COMMISSION
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LOCATION: Two Penn Center Plaza
16th Floor
Philadelphia, Pennsylvania

REPORTED BY: Amy Marzario,
Court Reporter

PRESENT: DONN SCOTT, CHAIRMAN
CHRISTOPHER DIFUSCO
MARC AMMATURO
REBECCA RHYNHART
CHRISTIAN DUNBAR
NICHOLAS HAND

STREHLOW & ASSOCIATES
PHONE: (215) 504-4622
FAX: (215) 504-7155
COURT REPORTERS - VIDEOGRAPHERS
54 FRIENDS LANE, SUITE 116
NEWTOWN, PENNSYLVANIA 18940
WWW.STREHLOWCOURTREPORTING.COM

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PROCEEDINGS

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MR. SCOTT: Good morning, everyone. It's my pleasure to call this meeting of the Sinking Funds Commission to order. The first order of business is the approval of the minutes. Is there a motion?

MS. RHYNHART: I'll motion.

MR. SCOTT: All right. Is there a second?

MS. RHYNHART: I can't second it.

MR. DIFUSCO: You can second it.

MR. SCOTT: Oh, I second it? Okay. The motion has been made and properly seconded. All those in favor say aye.

MS. RHYNHART: Aye.

MR. SCOTT: We're going to move to item number four on the agenda, Investment Performance Review. Christopher, I'll turn it over to you.

MS. RHYNHART: Do you want to

-- we have management and the union here. Do we want to just invite them up?

MR. SCOTT: Absolutely.

MS. RHYNHART: Okay.

MR. SCOTT: Come on up, please.

MS. RHYNHART: Just 'cause it's your pension fund.

MR. DIFUSCO: So we put the September and the October numbers in. Obviously, the September numbers are a little stale at this point given that it's November 25th.

MR. SCOTT: And my question is do we have the numbers to share with these guys?

MR. DIFUSCO: Yeah. I'll make them copies in a second.

MR. SCOTT: Okay, thanks.

MR. DIFUSCO: So I had asked more questions on the September numbers and the focus is mainly on October just because it's, you know, more recent. And so, Marc, I think that's the second sheet and I will

go grab a couple copies for you.

MR. AMMATURO: Everyone has the October in front of them?

MS. RHYNHART: Marc, can you remind me what PineBridge is? Is that an active manager?

MR. AMMATURO: It's an enhanced index so it's active but it's -- I think they call themselves an enhanced index so adding a little bit over the index. So not truly active so it's kind of a quasi --

MS. RHYNHART: So what's the expense on that?

MR. AMMATURO: It's low. I don't know the number off the top of my head, Rebecca. I can get that.

MS. RHYNHART: But it's more in line --

MR. AMMATURO: It's more in line with --

MS. RHYNHART: -- like with the eight or ten basis points, maybe a little bit more but not like 80 basis points?

MR. AMMATURO: Exactly. I can get that number to you.

MS. RHYNHART: It's okay.

MR. AMMATURO: It's closer to an index fund fee than an active management fee for sure.

MS. RHYNHART: Okay. I was just looking at it and I was thinking, Oh, that's a big allocation. But I'm like I'm sure we did it -- okay. So that makes more sense, an enhanced index.

MR. AMMATURO: And I'm going to be talking about them in a second, actually. But let me take a step back. I'll get to PineBridge in one second if that's okay. But the October 31st update should be in the book there.

The market value is up to $551,922,841.00 as of the end of October. You can see just for the month of October this plan was up 1.7%. You can see that brings your year to date, three or four columns over, to over 16%, 16.6.

I'll note, you know, it's strong

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and has a net of fees. I'll note that it's obviously strong on an absolute basis but it's also strong on a relative basis. So there's 12 basis points of outperformance relative to the index. So, again, slight outperformance.

The reason for that slight outperformance is because you're overweight in domestic equity and domestic equity has been the best asset class. Your three-year number is now 9.7. Your five-year number is now creeping close to 7%. And, again, your three-year number is now 9.7% and your five-year number is now creeping closer to 7. It's at 6.98.

You know, why the -- before I get into the managers, you know, the U.S. economy is slowly growing, growing positively. The last reading was 1.9%. Consumer confidence continues to be high. The Fed reduced rates three times this calendar year. You put all those three things together and that's been a tailwind to the stock market for 2019.

There are obviously some headwinds such as the ongoing impeachment hearings, the trade talk with China, what's going on in Hong Kong in terms of protests. There's a lot of headwinds but the U.S. economy is still growing. Consumer confidence is still high. The Fed cut rates three times. All that's been for the stock market.

Going back to the end of the fourth quarter of 2018, you might recall a significant selloff so some of this is kind of a bounce back from that selloff of last year in the fourth quarter. So that's what's going on at a high level.

But in terms of your managers, when we get into large cap, the two managers listed that are listed first, Rhumbline and Northern Trust, are both index funds so they're going to capture the market at value low cost.

So if you look at the year-to-date column, the returns are very tight to the benchmark, not surprising, for the month, for the quarter, for the year. This has

been a good place to be for passive investing. Domestic equity index funds have done really well and you've had almost 28 -- over 28% of the indexing through Rhumbline and Northern Trust.

The one manager that the Controller brought up, PineBridge, we're actually going to be recommending watchlist for PineBridge. If you look at the one-year number, they are up 10.7%. The benchmark's up over 14%. They've only been in your portfolio since 2017 if you look all the way to the far right.

Again, they are up, on an actual basis, strong at 9 and a half. Unfortunately, the benchmark is up 10.8. They're a quantitative enhanced index manager and one of the key factors they look for is valuation, so what stocks are trading basically low.

So I'm just coming up on PineBridge. We see the performance of the headwind and into -- I'm trying to get into why now. One of the key factors that they

look for in their quant model is valuation, valuation meaning the stocks that are cheap they tend to buy. Low value has underperformed as of late.

Again, low value stocks have underperformed and that's been a major, major headwind. Some stocks that are considered low value that have underperformed including some household names like Johnson & Johnson, Berkshire Hathaway, Exxon Mobile, these are three large moldings in their plan that are negative on a year-to-date basis and a negative on the quarter. So that's been a major headwind for PineBridge.

And that's a low -- what we consider a low trending error manager, meaning they shouldn't deviate that much from the benchmark 'cause their sector weights are right on top of the benchmark. But, again, if you look at the one-year column, underperformed by over 3, 3 and a half percent, it doesn't give us the comfort that it's kind of a low trending error management. We would think that the dispersion would be lower going back 12 months for PineBridge. So that --

MS. RHYNHART: What have they said? Have you spoken with them? What have they said about it?

MR. AMMATURO: Yeah. The one thing I just walked through right now is the valuation factors. They really looked for three factors in their quant model. One is sentiment, one is quality, and one is valuation. The valuation factor has been a significant headwind. They're buying stocks that are very, very cheap and unfortunately they are not performing well.

MS. RHYNHART: So it's just their strategy hasn't worked?

MR. AMMATURO: One of their three key factors has not been in their favor. So it's an argument or a -- I shouldn't say argument. It's a rationale that we can get our head around. It kind of makes sense. This is one of their key metrics. We did take a look.

Low value is not working so far in 2019 so we can get our head around that. That kind of makes sense. It's consistent with their strategy so they're not changing their stripes. But it's more to the extent of the miss.

Again, 3 and a half percent on a one-year basis for a low trend error manager is a lot so that's the reason. It's not like we were surprised in what they told us. We were kind of expecting what they told us but it's the magnitude of the miss.

MS. RHYNHART: What's entailed with watchlist? What happens when someone goes on watchlist?

MR. AMMATURO: I'll let Chris chime in here but what watchlist means for PFM is heightened scrutiny, monthly calls as opposed to quarterly calls, really understanding what's going on in terms of buys and sells within the portfolio from a PFM perspective.

Watchlist, correct me if I'm wrong, Chris, is one step away from termination.

We're not going to terminate them next month or next quarter I wouldn't think. It's just heightened scrutiny but it's one step closer potentially to making a change as opposed to, you know, the rest of the managers so it's higher scrutiny for us. Do you want to chime in on that or do you agree with that?

MR. DIFUSCO: I share your concerns. You and I had talked about this and I think I talked with Alex about it a few weeks ago. When we hired them, I mean, and you summed it up pretty well, that they're obviously inexpensive for an active manager. I think they're 16 basis points, if I'm off, 16 or 18. I can get you the exact number. It's very cheap for active management.

But what they sold us, so to speak, and what their model shows as, you're right, they shouldn't -- because of how they run the strategy, they shouldn't be deviating from the benchmark by 3%. If they miss, you would expect a much smaller miss. And if they'd outperform, you would expect a much

tighter outperformance.

So I concur with the watchlist recommendation. I may be slightly closer to recommending the, you know, termination window to PFM. That might be where we part slightly. But other than that, I agree with everything that they said.

MS. RHYNHART: Okay. Thanks. Do we have to take official action on that?

MR. SCOTT: I would assume.

MR. DIFUSCO: They're on PFM's watchlist. If you want -- if we're going to put them on like our version, yeah, we would need to take a vote.

MR. SCOTT: So we have two different watchlists?

MR. DIFUSCO: Yeah, 'cause you have -- internal. Like they have one that goes internal across the firm. If we want to put them on watch officially here, yes, we would need to do that. And I would recommend that. I concur with PFM on that.

MR. SCOTT: That we should do it now?

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MR. DIFUSCO: Correct.
MS. RHYNHART: The watchlist? Not termination, watchlist?
MR. DIFUSCO: Yes, correct.
MR. SCOTT: Okay. Is there a motion?
MS. RHYNHART: I'll make a motion to put PineBridge on watchlist.
MR. SCOTT: So a motion has been made. Is there a second?
MR. DUNBAR: Second.
MR. SCOTT: Okay. All those in favor, say aye.
MS. RHYNHART: Aye.
MR. DUNBAR: Aye.
MR. SCOTT: Thank you. How long do you normally stay on the watchlist or is it a function of discretion?
MR. DIFUSCO: That's a good question.
MR. SCOTT: And do they know that they're on the watchlist?
MR. DIFUSCO: Yeah, they'll be notified. And I don't want to give -- I

mean, the answer depends. Obviously, if their performance was to improve, you know, substantially, they would come off the watchlist.
If it deteriorates, you would be more likely to terminate them sooner. It's really a function of kind of how their performance responds over the next three, six months or however long the Commission decides.
MR. AMMATURO: That's what I was going to say. I was going to say in a couple quarters, the decision should be made. They come off watchlist or they get terminated within a couple quarters. I wouldn't imagine they're on watchlist for a year, year and a half.
MR. DIFUSCO: Yeah, it defeats the purpose.
MR. AMMATURO: So good news on the small cap side, if you look at small cap and you look at the year-to-date rows -- or I should say year-to-date columns, are 23% positive versus a benchmark of 17.

If you look at the quarter column, 1.84% positive versus a benchmark that's slightly negative. So good outperformance is really early. You can see these managers were just higher --
MS. RHYNHART: Higher, yeah.
MR. AMMATURO: -- in August of this year. So, again, it's very, very early to make any sort of conclusions but Copeland's off to an exceptional start. If you look all the way to the far right again, they're actually positive 2.9. The benchmark is negative 2.4. They're underweight in the healthcare sector.
Healthcare has been at -- has faced some serious headwinds so being underweight in that sector has helped Copeland. They're overweight in consumer staples and consumer staples have been a good place to be in calendar year 2019. So their sector weights have been very beneficial to their relative performance but all in all, a very, very good start for Copeland small cap.
Rhumbline, you can see

benchmark-like performance. If you look all the way to the far right, 0.99 versus 0.6. They just got into the plan in August of last year -- I mean, in August of this year. I'm sorry.
On the international side, similar to small cap in terms of year-to-date outperformance, look at the year-to-date column for international equities. 16.3 versus 15.4. So, again, it's good to see some incremental return event in such a strong market by our active managers. If you look at the quarter column, not as strong for the most recent quarter; 2 and a half versus 2.87.
You can see Acadian slightly missed; 1 and a half versus 2.8. Earnest Partners is kind of right on top of the benchmark at 2.79 for the most recent quarter and then you see some outperformance from Rhumbline. So net net on a year-to-date basis, good relative performance.
And, actually, if you look at 1, 3,

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5, good outperformance for those periods as well if you're international equity composite. The most recent additions in this asset class are Acadian and Earnest Partners. You can see all the way to the far right there again. They were just hired in May -- in June of 2019.

Fixed income. Similar theme here. If you look at the year-to-date column, it's good to see outperformance. Again, it's a very strong margin of not only the equity side but the bond side. Bonds are up over 8% in 2019. Why? Because ten-year treasuries have significantly declined. It's an inverse relationship.

So when long-term rates decline to the magnitude that they have in 2019, bond prices rally. So quarter bonds, again, are up over 8% this year. That's not a return you want to get used to seeing moving forward to be quite clear to segue into the next conversation. But, again, that is not -- and you can put that in the minutes. That is not -- I don't guarantee stuff.

So fixed income. Fixed income for the year up 9%, 9.02. The benchmark is 8.8. So, again, even in a very broad, very strong market, you see some incremental return which is great to see. Not so much for the month or the quarter, but on a year-to-date basis, you know, getting straight outperformance and this is net of fees to about the tune of 17 basis points on a year-to-date basis.

So why? Weavers Barksdale. Weavers Barksdale, again, if you can look at the year-to-date column, outperformed by about 60, 70 basis points. The theme on your fixed income side is these measures tend to be overweight to the corporate sector within the bond market and that's been a good place to be in 2019.

Default rates are not increasing. Rates have come down which has led to rallies in bond prices. So corporates have done well and that's a major theme within most of these managers, actually.

If you look at Met Life fixed

income, also overweight in the corporate sector, up over 10% for the year now, 10.1 versus 8.8. They also have a very, very small piece of high yield. About 3% of the plan is high yield. It's not exceptional which we'll see in a second.

Met Life investment incurred a credit on a year-to-date basis, slightly underperformed, 13.01 versus 13.4. But on an absolute basis, obviously a very strong manager -- strong return, I should say. Lozard up 7.16 for the year versus 6 and a half, very benchmark-like performance for the month.

Garcia Hamilton, another fixed income manager you have that's overweighted in the corporate sector. For the year, they're of benchmark-like. They're at 6.25 versus 6.8. And for the month, they're benchmark-like; 0.32 versus 0.4.

And then your high-yield manager. High yield, like I mentioned already, has done exceptional this year. If you look at the year-to-date column, high yield is up

over 11%. Sky Harbor's up 11.76. The benchmark's at 11.71. They're underweight.

The energy sector. Energy sector has not been the place to be in 2019 so that's been a tailwind to their relative performance for the quarter, for the fiscal year, and for the year-to-date period.

This might have been mentioned in the past but just FYI, Weavers Barksdale is now a female majority owned firm earlier this year. They're now owned by six females that own 51% of the firm. That occurred in August. I just don't recall if it was discussed at a prior meeting but Weavers Barksdale, again, they have 40 million of your pension plan. They're now female majority owned. So those are my comments on the month of October.

MR. SCOTT: Any questions before we move to the next category?

(No response).

MR. SCOTT: There being none, I guess we will go back up to number 3, Asset Allocation Review.

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MS. RHYNHART: Did you want us to go?

MR. DIFUSCO: Yeah. We didn't even know how much we were going to go but we've already been through this allocation piece twice. So I figured after your presentation if folks had questions or if they wanted to take everything kind of under advisement. But Don and I were talking and I didn't know if we were going to go through a lot of it this time.

MS. RHYNHART: Okay. So I'd just like to invite Nick Hand from my office up to the table. So just by way of background, the Controller's office did a similar analysis of the City's main pension plan several months back looking at risk and return and making some recommendations.

So we decided to do the same thing with the PGW plan. Nick heads my Finance Policy and Data Unit and is going to be presenting it. It shouldn't take more than about 10 or 15 minutes but he's going to walk you through if that works.

MR. SCOTT: Okay.

MS. RHYNHART: And I think we're on Tab 6. It definitely should be blue.

MR. HAND: Okay. Good morning, everyone. So we looked at various aspects of the plan and I'll walk through them briefly in this kind of presentation. But on slide 2, that's an outline of what I'm going to talk about.

We looked at a cash flow analysis using projections from the actuary, Aon, of the overview of the investment strategy looking at some of the current assumptions, results from the stress test that the actuary -- that we had asked the actuary to run, Aon, and then a couple other small items from the investment side of things.

So on slide 3, I'll dive right in with just a snapshot of where we were as of the last actuary report on July 1st. Funded status is 73% which translates to an unfunded liability of 200 million. And to put that into some historical context, a lot

has changed in the decade but as of September 2009, the funding status of the plan was 68%.

And then on slide 4, the first thing we looked at was the cash flow, the plan's cash flow. So what that is is the total contributions from the employees and from PGW minus the factored payments and other sort of miscellaneous expenses, so looking at that difference.

And it's a pretty standard way to analyze the fiscal health of the pension plan and it provides a measure of that gap between contributions and payments. That provides the measure of how much the plan depends on the investment return to make up that gap.

And, historically, the plan's cash flow has been negative, meaning that the plan pays out more in benefits than contributions it gets in. I think the most recent numbers, contributions are in sort of the 30 million range. That's 30, 31 million. And the contributions are in --

sorry, and the benefit payments are in the 55, 60 million dollar range.

MS. RHYNHART: And that's contributions from PGW as well as employees.

MR. HAND: And employees, exactly. So it's about a million from the employees and about 29 or so from PGW.

So on slide 5, the first chart there, these are the -- this is the funded ratio and the net cash flow under the baseline projections for the plan. And, again, this is from the actuary. So on the top panel here, we have the funded ratio starting around 73% in 2019 growing over the next 20 years to about 20% by 2038.

And these baseline assumptions -- baseline projections assume that the rate of investment return will be 7.3%. So that's the kind of main assumption under these baseline projection sets. And in the bottom panel here, this is where we see the net cash flow. And it's shown as a percent of the total market value of the assets.

So the way to interpret this is,

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you know, historically from 2013 to 2019, the net cash flow has been between -4 and -6% which means that in order to have to make up that gap, that investment return needs to be kind of larger than that value.

So if the plan returns -5% -- or, sorry, if the plan's net cash flow in 2019 was -5% and the investment return was 7.3, for example, under the baseline assumption, you have that difference, that 2.3% difference where you would then kind of grow the funded -- grow the assets of the plan. And what you see in the next 20-year projection is that the cash flow has stayed negative and kind of reaches a minimum of 6%, -6 in 2028, and then improves slightly into the -5 range.

So in the baseline assumption projected, this continues a negative cash flow trend that we've seen in the past. And then on slide 6, we wanted to kind of put this into historical -- some context, right? We wanted to look at some other public plans. How does our cash flow for the plan

compare to other public plans?

And the first thing that we did was look at the other 50 state plans. So we went and got the three-year cash flow values for the 50 state plans and only nine of those states have a cash flow that's more negative than the PGW plan.

And the second comparison that we made was to a database, the public plans database. There's a database of 187 public plans. The median cash flow for those plans was -2.9% where the PGW plan, the three-year cash flow is -4.5%. So, again, the PGW plan, more negative than sort of other public plans that are kind of out there right now.

So, again, just to underscore, the risk here is if investment returns underperform the 7.3 assumption, then because of that net cash flow being negative, assets might have to be liquidated and then you have to liquidate those assets to pay the benefit, to make up that gap between contributions and benefit payments.

And on slide 7, that's just highlighting the next chart there. That's just highlighting the comparison to the 50 state plans. So we have the funded ratio shown as the gray bars. So the Y axis here is sorted by funded ratio with the highest funded ratio states up at the top there. And then the blue diamonds, that shows the three-year cash flow.

And the top axis is funded ratio, bottom axis is that three-year cash flow. And so more to the right in terms of cash flow means more negative. And what you can see is that the PGW plan is right in the middle there in terms of funded ratio, about 70% or so, 73%. But the three-year cash flow, only nine of those states have values that are more to the right, more negative.

So, you know, we're not quite Kentucky or New Jersey. They are down at the bottom with very strongly negative cash flows and a low funded ratio which is very, very good. But just in terms of trying to put this number into context, we're kind of

right in the middle of the funded ratio but a little bit towards the outlining of the three-year cash flow value.

So in addition to the cash flow, we also looked at investment strategy, right? And sort of for more than a decade, kind of as long as we could find documentation, a plan has maintained the 65/35% split between equities and fixed income. And what that has meant more recently is that there's been a shift towards passive management and to lower management fees.

So in 2012, the allocation to passive or indexing was 6.4%. And in 2019, the most recent number was 41.6% of total assets were passively managed indexing. And corresponding with that decrease in passive -- decrease in active management shifting towards passive has been a lowering of the overall management fees for the plan.

FYI, 14.49% total assets were paid in management fees. And then in 2018, the fiscal year 2018, 0.37. So a shift toward lowering fees of the overall plan.

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MR. SCOTT: Can you translate that decrease from 0.49 to 0.37 into dollars?

MR. HAND: Dollars? I can't at the moment. I don't know if Chris could but we can --

MR. DIFUSCO: I can send that out.

MR. SCOTT: Thank you.

MR. DIFUSCO: So the most recent data was around 1.9 million in fees for the year. And that would also include -- lumped in with that would be not just the investment fees but invest in real bank. And something -- that would be everything, like all the -- not just the managers. But I'll get you the exact number after the meeting. I'll send it over.

MR. SCOTT: Thank you.

MS. RHYNHART: That would be interesting to see how much we're saving each year.

MR. SCOTT: Yes.

MR. HAND: And then on slide

9, the next item that we looked at was the kind of evaluating the current assumptions, the actuarial assumptions of the plan. So if you look at historical returns for the plan, we looked at 2001 to 2016. The plan returned at 5.33%.

And then again if you look at the median -- if you look at that public plans database, that database of 187 plans, the median return for those plans was 5.5 so we're right in line with that median percent for public plans. And then just as comparison, the City's larger plan, the municipal plan, over that same time period returned 4.77%.

MR. DUNBAR: Why 2001 to '16?

MR. HAND: That was what at the time was available and we wanted to have a large enough kind of time frame. This includes two recessions so we wanted to kind of have a large enough time frame to give a window and that number was just what was used in the most recent report from a Boston College study from the Center for Retirement

Research.

MS. RHYNHART: Yeah, and that's what -- I mean, these numbers look lower than what are shown in the PFM flash report just because the flash report does ten year which starts right after the losses from the last recession and then from inception which is from 1987.

So you're missing -- the 2001 to '16 which we did pick 'cause of Boston College and the wealth of data that they put out with their study, but it is including two recessions.

MR. HAND: Yes. And if you then compare that to what the -- the plan return assumption has been over that period, you know, it's currently 7.3% and the trend has been moving that downwards.

So as recently as 2010, the return assumption for the plan was 8.25 and that's in line with the kind of broader trends in the public plans. The median assumed rate of return for public plans was 7.75 back in 2014. That has come down to 7.25 as of

2018.

So we're in line with continuing to kind of lower that return assumption to better kind of match the current assumptions and moving forward for returns. And the next step that we looked at was to try to estimate what the most likely return would be on the investment side moving forward.

So what we did was run a set of thousands of simulations, a very sort of standard technique in the investment world where we took the average assumptions for fixed income returns and equity returns over the next 20 years.

The average values for those from a survey called the Horizon Survey which surveys about 30 investment firms and we took the average of those survey results and ran these simulations at a 65/35 split, what the plan currently has, and found that the most likely investment return moving forward was about 7%.

And I think that falls right in line with what PFM has found. They've run a

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very similar analysis where they have found 7.1% right in line with what our analysis found as well. And we asked the actuary, Aon, to estimate what that would mean in terms of the contribution for PGW if the return rate was lowered, the assumption was lowered to 7%.

And they came back and estimated that that would increase the required PGW contribution that they're required to pay by about 2.3 million dollars if it were lowered from 7.3 to 7 just to put some numbers into context there.

And then on slide 11, we also asked the actuary to run a few stress tests of the plans. So not the baseline plan assumptions but to alternate scenarios where we simulated a great recession-like event.

So this is the asset shock scenario shown in yellow in the figure here on slide 11 where there's a -30% return in 2018 followed by three years of +12% and then baseline 7.3% returns moving forward.

And the second scenario that was

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simulated was a set of 20 years where each year the investment return wasn't 7.3 but the investment return was 5%. So each year not meeting that 7.3 assumption and each year only getting 5% in returns, and that's shown in blue.

So you can see in the asset shots there, you can see that drop in funded ratio from 73 to just about 45 and then a slow recovery. And by the end of the 20 years, you're at about 80% where under the baseline assumptions you were at 90%.

And then in the 5% return scenario, this is where really you start to see the impact of the negative cash flow. Because the net cash flow is more negative than 5% and you're only getting 5% in investment returns, each year you have to liquidate your assets and your funded ratio drops.

So each year, you're liquidating some assets to pay benefits because the investment returns aren't making up that gap. And, correspondingly, you see the funded ratio continue to drop. So starting

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in 2018 with the 73%, by 2038 in 20 years, each year we only get 5% returns and you're down to about 60% in terms of the fund ratio and that's really the impact of that negative cash flow.

And on slide 12, you can also look at how this impacts the required contribution for PGW for these two alternative scenarios. The asset shock scenario, the required contribution jumps immediately because of that single-year drop. And then on average, the annual increase is about 12.2 million over that 20-year period.

Over the baseline assumption, that's an additional 12.2 million each year on average. And then under the 5% return scenario, the extra contribution slowly builds over the 20 years as we continue to kind of have to liquidate assets and trying to make up that difference.

So for the 5% return scenario on average, an extra 9.4 million dollars over that 20-year time period. Then, lastly,

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there were just a couple of small things that we wanted --

MR. DUNBAR: One quick question?

MR. HAND: Yeah, sure.

MR. DUNBAR: You use 30% of the asset shock. Is there -- why 30%?

MR. HAND: Yes. So that's consistent with the Dodd Frank Act. That was -- the kind of impetus behind that was the Dodd Frank Act and trying to -- it's larger than the Great Recession but trying to estimate -- trying to basically capture what the worst case scenario could be. And we looked to the Dodd Frank Act, the regulations laid out in that.

MR. DUNBAR: Do you remember what the aftershock was during '08/'09?

MR. DIFUSCO: So I think it's -- well, it depends on how you define it. If you define it just based on equities, it would be larger than that but I know that the -- just by way of comparison, the municipal lost about 19, 19 and a half

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percent.
MS. RHYNHART: In one year and five in the others?
MR. DIFUSCO: Yes. I was just doing that but you're absolutely right. So 19 the first year and then five the following. And so, you know, 30 in that sense is not -- and, again, combined with the Dodd Frank regulations is not, you know, it's not an out-of-line scenario based on, you know, past precedent and kind of assuming the worst of the worst.
MR. HAND: Yes.
MR. SCOTT: And maybe I should know this but I don't. What dictates what PGW does as it relates to funding the short form?
MR. HAND: So there is a funding policy.
MR. SCOTT: There's a formula?
MR. HAND: Yes. So right now, Chris, correct me if I'm wrong, but they're funding at a 20-year open.

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MS. RHYNHART: It's the higher -- it's the more --
MR. HAND: Oh, higher. 20-year open and 30-year closed. Right.
MS. RHYNHART: It's a requirement that -- where is that set forth? It's set out in I think --
MR. DIFUSCO: A letter that goes to PGW annually that the Finance Director provides assuming he makes -- or she, but assuming he makes changes, he sets out the parameters of the funding policy and that's the most recent one that he's provided.
MS. RHYNHART: So every loss is spread out? So the -- it changed to the greater of the 20-year open and 30-year closed a few years ago. So the unfunded liability from a few years ago has to be advertised every year according to that.
Then any additional unfunded liabilities, say, from returning either five below the -- five to seven or a big asset shock has to be then amortized according to

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either the -- it starts at that date and then is amortized over 20-year open or 30-year closed, the greater of.
So it's almost like you have the baseline unfunded and then any additional gets spread out over additional years as it's added into the unfunded liability. And then the Finance Director sets the assumed rate of return.
MR. SCOTT: Thank you.
MR. HAND: Great. So then on slide 13, just other considerations that we looked at, the first being -- I think this has been discussed in past meetings but 11% of our fixed income is high yield that Marc talked about. And the benchmark -- the overall benchmark for the fixed income allocation doesn't include any of these high yield low credit fixed income bonds.
And we were recommending that we could then adjust that composite fixed income benchmark to include -- to better capture the high-yield allocation, that 11%, in order to kind of make sure we're

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evaluating those riskier assets properly.
And the second was with respect to this discussion around alternatives that we've been having at the past few meetings. And I think our office, you know, we've reviewed those materials from PFM and the additional benefits. There's benefits from diversification and higher returns.
You know, there are risks associated with alternatives; liquidity and higher fees, things like that. But I think with the kind of small allocations, less than 10% that we've been considering, I think our office believes those benefits outweigh those potential risks.
So those were the kind of last two things that we looked at. And then on that last slide, we just have some final recommendations and I'll pass it over to the Controller to go through those.
MS. RHYNHART: Thanks, Nick. So overall recommendations and the first one -- I guess Christian is the sub for Rob. And obviously, you know, you would need to

go back and discuss with him but the recommendation is to reduce the return assumption towards that 7%.

I know that -- I mean, I think the concept and idea of investing in alternatives to get up to the 7.3, we look at it a little bit differently which is that given the negative cash flow and the risk around that that PGW should be looking to reduce that assumed rate of return and then at the same time can have a small allocation to alternatives.

But there should be an increased conservatism in that return assumption, especially given the cash flow. I know PGW has expressed some concern about making any changes to it too quickly as it relates to the timing of your financial statements and your audit.

And I know that you've made some mention that it would be better if this were taken up in the January/February time frame. That's completely fine. You know, no issue from us on that. But we do think that, you

know, you should start to lower that.

The second recommendation is to evaluate options to improve the cash flow. It is a risk to have such a negative cash flow so the options should be looked at in that regard.

And then the third is to require the stress test in the investment policy statement. That's something that we've done for the main municipal pension plan this year. We made that change in the investment policy statement and it's just good to have a frame of reference of what would happen in those scenarios and then what would the required contributions from PGW have to be because it gives a sense of what the rate payers would have to pay.

And then the last one, I don't think anyone disagrees with this one, just to publicly disclose the annual management fees. Just the best practice. So those are the recommendations. If there's any questions, comments?

MR. DIFUSCO: I talked to --

Rebecca, you and your team were gracious enough to allow me to see a draft about a week ago. As I told you then and I've talked a little bit to PFM, no objection. I've already talked to Amy on your team. We can very easily put something together once or twice a year in the report to disclose the management fees. That's very easy to do.

MS. RHYNHART: Okay.

MR. DIFUSCO: I was actually able to pull the numbers. So in fiscal year '18, they were about 1.9 -- 1.95 million. Going back to fiscal year '14, they were about 2 and a half. So you're talking about a $500,000 a year savings to date.

But putting -- you know, and, again, that includes the consultant and the custodial plan. That's an all in. The stress test, if we're going to do them anyway and I know we are -- if PFM disagrees, no reason not to formalize that investment policy statement. No objection there.

So on those -- and certainly open to, you know, discussions from yourself, the other commissioners about wasting improved cash flow. Marc and I talked I think late last week. It's not a problem to tweak the benchmark to have a 10 or 11% allocation --

MS. RHYNHART: Oh, good.

MR. DIFUSCO: -- to high yield. We can create a custom benchmark at 90/10 or even something similar, so that's very easily done as well.

The last one, obviously, Christian, myself, whoever can take back to the Finance Director. That's above my pay grade as far as the assumed rate of return goes but I'm happy to continue those conversations.

MR. DUNBAR: I mean, if I could interject a bit?

MR. DIFUSCO: Sure.

MR. DUNBAR: So when we're thinking about PGW, we have to think about the system as a whole. And so reducing the assumed rate of return besides obviously increasing the contribution of PGW, we also

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have to think about it from a PGW credit rate perspective as we go out to market, you know.

So we're in the process of, and Joe and Dan know this well, in the process for quite some time now of trying to get PGW a rated increase. We think the rate indexes are wrong on PGW from a rating perspective and that plays significant roles in when we go to markets what to get obviously from a bond perspective.

So reducing our rate of return right now would not be helpful in our effort, right, if we're going to see a reduction in the funding level. And so it's unlikely that there would be a recommendation to do that in the short term.

And that includes going past January probably because, again, we're going to take PGW to market sometime next year and we're in this process right now of trying to get them a rated increase and we don't want to do anything that has a negative effect on attempting to do that. Because, again,

reducing the rate of return increases their contributions.

But if we then put the CA negative rate movement for PGW because of these actions, we're going to see an increase in that cost which will then, you know, have a sort of countereffect of what we would want to see from a pension perspective.

So, you know, so what we think is probably a best move in a short to medium term is probably looking at asset allocation, a mix of bringing in alternatives, seeing how that plays out before we take any rate action on there, on assumed rates.

MS. RHYNHART: Okay. So just to comment on that, I mean, the rating agency -- from a rating agency perspective -- and I worked at a rating agency for several years, I mean, they can see through this. So if you go and lower your assumed rate of return, that's the better practice. They know that.

Of course it adds a liability to

the balance sheet. They understand that. If you go to get it in rates, you're lifting the debt service coverage on the revenue and expense side. So to me, that's sort of a non-argument. There are other arguments that can be made. But from a rating agency perspective, I mean, I'm just saying that's --

MR. DUNBAR: In some ways, we would absolutely agree with you and I won't play it out to be quite honest. I mean, we continue to make a commitment to our larger pension plan obviously, up and above our minimum requirement.

We've continued to lower our assumed rate of return on the larger plan and we know that it's had a negative effect on ratings --

MS. RHYNHART: I don't agree with that. I don't agree. But anyway, look, this is not my -- I was told very clearly on my second day in the job that the City Controller cannot vote on the assumed rate of return. Okay? So I have said my

piece. It should be lowered. A few months is fine but, you know, that's my position.

MR. DUNBAR: Fair enough. I mean, I think it's a responsible position. I'm not saying that. I think we have all the considerations that we think may take precedence over that in the short term.

MS. RHYNHART: I think it's the wrong call but we can move on.

MR. SCOTT: So what do we need to do as commissioners?

MS. RHYNHART: We need to go do the other things.

MR. DIFUSCO: The stress test, the management fees, and the benchmark changes. It's not in there but it's elsewhere in the presentation about adding to high yields. Those are the three recommendations.

MS. RHYNHART: I can make that -- the recommendation, yeah. The recommendation to change the high-yield benchmark -- sorry, change the fixed income benchmark to add a high-yield component,

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require annual stress tests in the investment policy statement, and publicly disclose annual management fees. I make a motion for those three items to be changed.

MR. DUNBAR: So noted.

MR. SCOTT: So the motion has been properly seconded. All those in favor?

MS. RHYNHART: Aye.

MR. SCOTT: So that's passed. How do you resolve this other issue or you just don't resolve it?

MR. DUNBAR: In that motion, was there the allocation change?

MS. RHYNHART: I mean, we could make a recommendation that would have a divided vote but I don't know what purpose it would serve.

MR. SCOTT: I agree with that.

MS. RHYNHART: Yeah. So, I mean, it might be -- I mean, you're Rob's -- you're the Finance Director's substitute so it's up to you. It's not up to you at this moment but it's up to the Finance Department

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and the Finance Director. If they don't want to do it, then I don't think the Board can force them to do it.

MR. SCOTT: Yes.

MR. DIFUSCO: So would it make sense -- I didn't mean to interrupt you.

MR. SCOTT: I was just going to ask do you revisit it in six months? I mean, does it just go away?

MR. DUNBAR: I think we should revisit it for sure.

MR. SCOTT: Okay.

MR. DUNBAR: 'Cause, I mean, I do think it's a responsible suggestion. I just think we need to revisit it just given some of the things that we're trying to do with PGW in a relatively short term.

I think we're aggressively trying to get a rate increase and that has to take precedence in the short term right now. But I think we should revisit it in six months.

MR. SCOTT: Okay.

MS. RHYNHART: So May. We'll

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revisit it in May.

MR. DUNBAR: And then the asset allocation, we haven't taken an action on that. Do we have alternatives?

MR. DIFUSCO: So -- and, Marc, jump in if you think I'm wrong. I think it would make sense for staff and PFM to start looking at some like tentative recommendations in terms of specific alternatives but recognizing the amount that may or may not be suitable depending on where the assumed rate goes for the specific type of alternatives may be a little bit in flux, right?

We've talked about going as high as ten. I think we're realistically, even at a 7.3, it's probably more like 5 to 7 and a half. But, obviously, if we were to drop -- let's say even if we made the drop to 7 -- I'm completely making this up. But say you just drop to 7.2, you would still probably need slightly less alternatives than you did.

So I think PFM and staff looking at

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some of the alternatives that we would recommend and in what quantities makes sense while this discussion plays out with the Finance Director and Christian and then ultimately to the commissioners. Does that work from your perspective?

MR. AMMATURO: Yeah. I mean, we can move as quickly as we want or we could kind of pause for a meeting or two. But, you know, if we're given the green light, I think the next step is making sure we're abiding by policy statements.

Obviously, the next step after that is to say, Okay, here's some private debt managers that are on PFM's approved list and kind of start socializing with those managers and how it works and the higher fees you would incur, the illiquidity you would occur, just to get more specific to that particular alternative for sort of the full appreciation for obviously moving forward.

So that's the next step, education around what alternatives does PFM recommend

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and what alternative managers does PFM recommend and see where those conversations go.

MR. DUNBAR: I mean, I would think in terms of what percentage within the funding should be plays a role in, you know, their assumed rate of return. But the question of whether we should have alternatives or not I thought was somewhat settled, you know, was settled to some degree.

And I think you need a recommendation from the Controller's report that, you know, the risk is worthwhile into the plan. So the question I guess in my mind is are we having a discussion that we should do alternatives? We can discuss how high it goes but should we be doing alternatives? Should we allow the plan to do alternatives? And then at least start evaluating those managers and take them a step forward.

MR. AMMATURO: And correct me if I'm wrong, Chris, but I think we're past

the threshold where we are -- and correct me if I'm wrong, but where we are going to do alternatives is a matter of who we're going with and what asset class within the alternatives --

MR. DUNBAR: I guess the question is, do we need to take an official action for alternatives or not? Or have we already taken that action?

MR. DIFUSCO: We haven't taken that action and it would require some changes to the IPS. So, yeah, you would have to take a motion to do that. I mean, we -- and, obviously, Marc and I can informally look at managers but in terms of moving anything forward, we would need -- formally, we would need tweaks to the IPS and the green light from the Commission to do that.

MR. DUNBAR: Okay. So, I mean, I would then make a motion for us to see some tweaks to the investment policies to give us an opportunity to take action in the future if we think it makes sense.

And then we can run it in conjunction with -- to some degree with the assumed rate of return at least in terms of what percentage we should be at.

MR. SCOTT: I'll second that.

MS. RHYNHART: What does that exactly mean though? I mean, what type of language are we at? What are we voting on? Is it saying allowing alternatives no more than 10% or something?

MR. AMMATURO: Yeah, I think we need to establish a strategic long-term target for alternatives and do a band of min and max.

MR. DIFUSCO: If I recall, either at the last meeting or the meeting before, there was a draft that IPS provided.

MR. AMMATURO: Yes, there was.

MS. RHYNHART: Oh, okay.

MR. DIFUSCO: I didn't provide it.

MS. RHYNHART: It's okay.

It's fine.

MR. DIFUSCO: I apologize. I didn't provide it here but there was specific language provided either at the October meeting or the August meeting.

MR. AMMATURO: And it was exactly that, Controller. It was kind of a strategic target at a min and max so that would be --

MS. RHYNHART: But it was something around what I just said?

MR. AMMATURO: Yes.

MR. DIFUSCO: Yeah.

MS. RHYNHART: Okay. I'm fine with that.

MR. DIFUSCO: And I think it'll actually be lower than ten.

MS. RHYNHART: Right. And we would have to approve each additional --

MR. DIFUSCO: Yes, each manager. It's not something that PFM or staff has the power to deal with it so it's no different than hiring a banks manager. You have to see all the research and the

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finalist and -- yeah, same process.
MR. AMMATURO: So is this going to be parallel efforts where come to our January meeting, we'll obviously finalize the outcasts with alternative language as well as PFM should be prepared to talk about who we recommend, what asset class we recommend within alternatives including what managers or is that too quick? I just want to --
MR. DUNBAR: I'd like to hear that. I mean, I don't know that there's a real reason for us to wait, to the extent that you can get that stuff in that time frame.
MR. AMMATURO: We just won't take any time off over the holidays.
MS. RHYNHART: I mean, it's sort of a slow process though, right, to ramp up?
MR. DIFUSCO: Yes.
MR. DUNBAR: I think the commissioners still have to put things on pause to allow that if you're not

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comfortable.
MS. RHYNHART: No, no. I'm just saying in general, it's a slow process to add private debt and private equities.
MR. AMMATURO: Oh, yeah. They're going to call the capital and --
MS. RHYNHART: Yeah. It's a slow process.
MR. DIFUSCO: And the legal negotiations take longer; the decide letters and the fact that it's a general partnership.
MS. RHYNHART: Right.
MR. DIFUSCO: So it's much more difficult to staff PFM and Adam to negotiate the contract that would be with Rhumbline or Garcia Hamilton so it's definitely a slow process.
MS. RHYNHART: So Don seconded it. Do we all need to vote in favor? Like I feel like it's sort of --
MR. DIFUSCO: Yeah. You still have to have a vote. But, yeah, there was a second so there should be a vote after

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the second.
MR. DUNBAR: So you just have to say all in favor.
MR. SCOTT: All in favor?
MS. RHYNHART: Aye.
MR. DUNBAR: Aye.
MR. SCOTT: Okay. But I need to understand what we're saying that about. So we went through the asset allocation, right? And is it all right to clarify?
MS. RHYNHART: Yes, please.
MR. DUNBAR: After the vote, yes.
MR. SCOTT: I know it passed but I thought we also said that we're going to vote on each --
MS. RHYNHART: We will.
MR. DIFUSCO: Each manager, when we bring them in in the future --
MR. SCOTT: That's where I'm going with it. So in order to improve the return, we're talking about looking at different managers --
MS. RHYNHART: Right.

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MR. SCOTT: -- and different asset classes --
MR. AMMATURO: Within alternatives.
MR. SCOTT: -- versus waiting?
MR. AMMATURO: Yeah. We're moving. We're going to be educating the commissioners on additional managers within alternatives starting in January.
MS. RHYNHART: Right. All we did was vote on changing the investment policy statement to allow for PFM to move forward with researching and getting together alternative options for us to then vote on in January.
MR. SCOTT: Okay. Got it. Do we have any new business?
MR. DIFUSCO: I do not.
MR. SCOTT: All right. So is there a motion for adjournment?
MS. RHYNHART: I'll motion to adjourn.
MR. SCOTT: All right.

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MR. DUNBAR: I'll second it.
MR. SCOTT: Thank you.
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(This concludes the meeting at 11:05 a.m.)
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CERTIFICATION

I hereby certify that the proceedings and evidence noted are contained fully and accurately in the stenographic notes taken by me upon the foregoing matter dated November 25, 2019 and that this is a correct transcript of the same.

Amy Marzario
Court Reporter - Notary Public

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