

Colin

Thank you and welcome to this forum. For those of you who don't know me my name is Colin Pinter. I am the independent facilitator for this process of site selection that has been ongoing. I know there are a number of people here tonight who haven't necessarily been registered before. Can I insure that if you wish to continue to participate in the process if you could make sure that you register your details with Steve McKenzie over here. So if you do wish to participate please register with Steve.

Before I explain the format for this evening I would like to acknowledge a group of Noongah elders and Noongah people who have a strong connection to the land here who would like to make a statement. Some of you have received a letter that has been tabled about their links to the land. And two elders, Robert Bropho and Albert Karunner have asked to make a brief statement about their position and I will hand it over to them. Listen to them for about five or ten minutes and then we will deal with details. So I will hand it over to Robert.

Long silence.

Colin

Albert and Robert didn't want to take questions, they just wanted to make their statement to let you know there is some documentation and the Noongah elders and people won't stay for the rest of the meeting. So thank you for coming out tonight.

In terms of the plan for this evening there is essentially two distinct tasks this evening. The first task will be run by Jenny Hope from GHD. The second task will be looking at each of the four sides having the opportunity for people to raise questions or issues based on the information that you were provided. Within that second part of the meeting, certainly the issues that were just raised there may be an issue you'd like to discuss. The first part of the meeting that Jenny Hope is going to run is trying to seek imports from people here into what the Water Corp's own sustainability assessment process. So she is going to be taking you through a process she is going to explain in a minute to gather your input into the Water Corp's internal sustainability assessment process. That is a separate process to the rating and process of identifying a preferred site that you will have the opportunity to participate in.

So the first part of tonight's session is to work through so that you can have input into the Water Corp's own sustainability process. We will work on that for about an hour and twenty minutes and then we will take a short break. Then the second part of tonight's meeting will be looking at going through each site one by one. Any questions on the information that the Water Corp provided to you, Robert will show you what the plant will look like on the sites. And you will have an opportunity to raise issues about each site.

The purpose of that is simply to have a discussion about those sites. We are not asking people to do any rating of those sites this evening. But we will be explaining how you might have an opportunity to rate the sites yourself at the end of that sessions. So there are two parts to this evening. The first part GHD will run.

The second part will be myself with Robert. And any suggestions and comments from the floor. So I will hand over to Jenny Hope you met last time. Jenny just recently completed a PhD actually on the issue of sustainability assessment. So she is one of the key practitioners around the state. One of her colleagues here tonight is Ross Bladski who is from Murdoch University who is working with Megan on this process. And I will explain to you what is happening. So will hand over to Jenny.

Can I suggest that in terms of the structure for this evening that very issue is part of the second part of this evening's discussion. In terms of our plan I would like to discuss that when we've got time in the second part of the meeting to discuss it. So if you can hold it until then that is when we will discuss it. I want to discuss it then.

Jenny

Thanks Colin. I have met most of you at least once or twice but just to repeat my name is Jenny Hope. I am GHD which is a consulting firm which Water Corp has hired to help them through this final status of the site selection process. And I have a colleague with me, Ross Bladski from Murdoch University, as Colin mentioned. And I will introduce you to Ross partly through the presentation and he will be giving the section half, inviting you through the process that we are going through tonight.

Tonight, I know some of you have heard this a couple of times, but just in case there are some new people tonight, I am just going to present a little background to the process that we are about to undertake. And the key about this process is sustainability of assessment using the specific technique of multiple criteria analysis which is what we have been doing over the last couple of months. Then I will talk through the criteria that Water Corp is using to make the final decision of their recommended site. And then what we are here to do tonight is input into this process is weighting. And I will explain again as we go through what that means. And I will get Ross to help talk us through the weighting process and what is required there. Ross has been appointed to assist Water Corp in this process.

And what will come out of this will be some information that will help Water Corp make its final decision as to its preferred site for the water treatment plant. It is technique that doesn't spit out a right answer, but it provides a structure base for us to get more information than we have at the moment about what site might be the best from an overall sustainability perspective.

So multi criteria analysis for those of you who haven't heard it before has to do with basic steps. The first one is to identify criteria by which the decision is to be made. And because this is a sustainability assessment these criteria in these cases are sustainability criteria, so they reflect environment, social and economic considerations.

The second stage of the process is the assessment of how well each of the four remaining sites performs against each of those criteria. And in the MCA process we call that scoring. And the scoring has been almost complete and there is a summary sheet that you might want to pick up on your way out if you haven't already done that which shows you how well the site is weighted against each of the criteria. And you will see that some may score well against some criteria and poorly against others, and other sites it is reversed. So you will be able to see from looking at that sheet what a difficult decision it is to choose the preferred site in this case.

What we are here for tonight is step three. What we are doing is making the importance of the criteria with respect to each other. There are eleven criteria. So what we are asking you to do today is to think individually from your own personal views how important each one should be to Water Corp in making its final decision. But Ross will talk you through exactly how that works.

The fourth step is the analysis of the results and that is when we combine the scores and the weights to give an overall ranking under different scenarios. And again that is Ross's expertise and he will be talking about that if you wanted to know about that. So as you know it is going to be a long process and we have used a number of different sets of criteria along the way. All of them have been within the sustainability framework.

Water Corp has been trying from the very beginning to look at this decision within the sustainability context. And as I said there are now 11 sustainability criteria. It is very difficult to come up with this criteria because everything is interrelated. One of the important thing about the Multi Criteria Analysis process is that we try to come up with criteria that don't overlap too much so that we are not double counting. And I am going to go through what each of the criteria are and make sure that everyone understands how they were defined. Because they might not be defined in exactly the same way that you might have defined them yourself. But it is important that you understand how Water Corp defines them before you do the weighting process to consider how important they are.

And these are the criteria. I will go through each one in more detail. But just so you can see that there were four environmental criteria. Although some of them are quite complex. Biodiversity has quite a number of different aspects to it. For example there were five social criteria and two economic criteria, a total of eleven. So in step two we assess what the impact were for each site with each of those criteria. And it was important that that assessment process was done by a appropriate experts.

And of the eleven criteria, four of them had community involvement in the scoring process. They were the community amenity, recreation on terms and values, biodiversity, and the potential for land degradation. For all of those groups of nominated people from the community came out with us and helped us to decide how well each side did against each of those criteria. And the results of that process are both on the summary and also on some short little reports that Megan and I put up which should be on the Water Corp website. If not now, then very shortly.

So this is for a step that is most important to us tonight. And this is the weighting step. So what we are doing is deciding how important each criterion is in relation to each other criteria in the context of this decision. So we are not asking you to make a general global decision about whether for example green house gas is more important than biodiversity or anything like that. In the context of the Mundaring Water Treatment Plant, we want each of you as an individual member of the community to say how you feel about the relevant importance of these issues. Clearly that is going to be very much a personal choice and we would not expect that people would come up with the same answers. We wouldn't necessarily expect two answers to be the same in the room.

We have also been through this process with Water Corp last Tuesday and asked various representatives from Water Corp must who have not been directly involved in

the Mundaring project to undertake the weightings. So we will have to sets of weighting results, one from the Water Corp and one from the community. And there are various ways that that data can be handled. We can average the two groups, we can compare the two groups, and Ross again will be able to answer some questions about happens to the data.

In the final analysis what we effectively do is we use a mathematical algorithm to combine the scores and the weights to give an overall ranking of the sites. That is all done through a spreadsheet and it gives us an opportunity to say the community will make the decision based on the information that we have, how would that come out? If Water Corp were making the decision by themselves, how would that come out? And helps us to look for reasons why the two results might be perhaps different.

It also gives us the opportunity to ask a lot of "what if" questions. When we did the scoring for some of the criteria, whether we had groups of people involved, in some cases we didn't always agree on what the results should be. But that doesn't matter because we can do this thing called sensitivity analysis and we say well what if everybody had agreed with this set of data, or what if everybody had agreed with that. And maybe it makes a difference, maybe it doesn't. But we can put both of the options through the spreadsheet to find out what difference that would have made.

So the purpose of tonight is going to be to weight the relative importance of each criteria based on our personal values. We need to be able to understand two things to be able to do this. One is firstly what the criteria are and what is included in them and what is not. And the second one is the weighting process itself. You've all got a handout which is basically exactly the same as what I am going to show, but it is so that you've got it in front of you when we come to do the process. So there is information about the criteria and there is information about the weighting process as well.

So the first one of the criteria on the list is biodiversity. This is one of the ones where we had community and specialists input in from those different groups in the community. And Megan, my colleague from GHD has been coordinating this one. There are a lot of issues. It is a complex one. But issues included the overall ecological value of the sites, the conservation significance, the clearing footprint required at the sites, so the amount of native vegetation that would be required. Some of the sites are more clear than others already. The value of the site for native soil and specifically the diversity of soil. So is it a rich and biodiversity now or is it not. And the value of the site to the native foreigner. Specifically the value of the site to support native species. Including significant species, and body of the site as a form of habitat and the use of the site as a habitat linkage as well. I know that you will have lots of questions about how the sites performed which as Colin said is the second part of tonight. But are there any questions about what is included in biodiversity or any of those things up there actually mean? Could you direct them to Megan, if you don't mind. Thanks.

I think what we might do is I will run quickly through what is included in the rest of the criteria and then open it up for clarification questions when we get through the criteria to make sure we do get through them all.

The second environmental criterion was potential for land degradation. In this case, this was a criterion that had a few different things rolled into it. What we are talking about is the potential decline in condition or the quality of the land as the consequence of human

activity. So what is the potential for the land to be degraded if we were to put a water treatment plant on it. And that includes issues of soil erosion degradation, the potential to introduce diseases and weeds, and obviously making that assessment as to how the site's perform you have to take into consideration what the site is like now and how sensitive that particular site by virtue of its characteristics and its location, how sensitive it would be to land degradation. And this is another one of the criterion where a group of community and representatives and experts from the community went out and worked with Megan to undertake the scoring process.

Embedded energy. This is an interesting one. This is one that is very important to Water Corp. It refers to the amount of energy that is being used to produce the materials that the water treatment plant would be made of. And the reason that is important is that the amount of energy used to produce the plant itself is related to greenhouse gas emissions. What it doesn't include in this case is the energy required for the operation of the sites. And the reason that wasn't included was that the amount of energy required to operate the plant would be the same pretty much at any of the sites. So essentially what this criterion was about was about trying to minimise construction materials. So sites that require less piping, basically perform better against this criterion than ones that required more piping.

The interesting thing to note, and Robert worked this out for us today, is that it is important to know how significant embedded energy is in the context of overall energy use. And Robert has calculated for us that the energy that is actually bound up in the middle of the pipes is only about 3% of the energy that would be required to operate the plant over its predicted lifetime. So from that perspective you could say that embedded energy is related to the overall energy is quite a small number but it is still something that is important in our consideration of the sites.

Water leak from water cycles is the fourth of the environmental criteria. And this includes the impact of the plant on natural water ways. This includes rivers, streams, wet lands, minor drainage lines, the vegetation that grows along the water ways. And it has a lot to do with capture and protection. Most of you will now that this criterion relates very strongly to the pine plantation site which is in the west reservoir protection zone from Mundaring Weir. But it is also a philosophical issue for the Water Corp that being the water utility one of their principals is not to mess around and change natural water ways more than is necessary. So that is why this criterion was included for sustainability criteria for this project.

Hazardous chemical risk. In the water treatment plant process there are various chemicals that are used in the treatment process. By far the greatest and most dangerous chemical that is used is chlorine which of course is used for disinfecting water. It is used all over Perth in many different locations. The risk assessment that is being done, looking at these hazardous chemical risk of the four different options is based on chlorine because chlorine is the most hazardous. And we have our colleagues from GHD, Mark Chung and Matt Smiley down at the back there who did that analysis for us and you will have opportunities to ask them questions should you wish in the second part.

But what we are actually talking about here is the potential impact of the plant and the chemicals of the plant on health and safety on residents and on visitors to Mundaring. People who are coming to see the parks, the museums, the other facilities, the users of

the walking trails. So what is important with this criterion is to note that all of the sites meet all of the safety requirements that they need to meet. So the danger is zero affectively. But because everything is risk based you can say that the closer you are to a dangerous chemical, the higher the risk. So the way the scores have been calculated, is basically to look at the number of facilities that are in the vicinity of the four plant sites. So it means that the sites that have more facilities, more houses, more walking trails have scored worse on this than a score on those that have less facilities around them. But the important thing to note is that all of them are safe. And Mark will be able to answer any questions you have about that.

Inaudible question asked.

Jenny

Yes it does. Well that has been done for you by Mark and that is part of the analysis so he will be able to answer any technical questions in the second part of tonight. But topography was taken into consideration, that's a good point, thank you. Thanks Robert.

Community amenity was one that obviously was very important that we had an input from members of the community and we had the tour people come and help us assess the impact on community amenity of the four sites. Something that I need to emphasis is that community amenity for this purpose was defined quite narrowly. In this case what we were really talking about was the nuisance impact of the plant. So we were talking about amenity quite separately from risk because as you can see risk is a separate issue, quite separately from biodiversity, quite separately from heritage which we are about to discuss. So in essence when we talked about community amenity and we were talking about what potential nuisance could the plant perhaps cause to the people in their homes. And that included visual impact, the potential noise from the plant, potential noise, extra noise from traffic and congestion from traffic. And also light spillage where there was a potential for light to impact on houses. So a lot of those discussions was based on location again. Where the houses were, whether they were above the plant or below the plant. And we ended up with three quite different views on the scoring, all of which have been recorded. And again it just reflects that it is a very subjective kind of analysis in this case.

Sorry there is another microphone, sorry. I prefer... that's why I was hoping we could hold most of the questions until the end. We are almost there so if you would bear with me then, it will be better with the microphone.

The next social issue was recreation and tours and values. So this was sort of subtlety different from the community amenities in that we were not looking at people in their homes but we were looking at visitors who come to enjoy the amenities that Mundaring has to offer. No sorry that is a mistake in the slide. I will talk through it. Essentially it is very similar to community amenity except that in this case we were talking about impact on visitors to Mundaring and effectively though it came down to the same thing.

It came down to what are the impacts of the plant potentially on people who are sitting in Fred Jacoby Park for example or people who have come to museums or people who are walking on the Bibbulman track what would they be able to see? How much would that

affect their experience of what they were doing? What sort of light might impact on a camping site for example. The various recreational facilities in the area. So the issues that we looked at were the same but the perspective that we looked at was slightly different in this sense. And again we had our representatives from various recreational groups. Including the managers of various walking trails that came along and helped us to decide how each site performed. From the perspective of recreation and tourism.

Indigenous heritage is an interesting one too, because it was determined that the water treatment plant could have both positive and negative dimensions. Clearly if there is disruption of artefacts or areas where it is possible that historical artefacts could be found, that would be a negative impact. Or disruption of locations of historical significance. Also if the water treatment plant required the relocation of historical buildings that would be undesirable too. Because they is value in the buildings and artefacts being able to be studied in the location where they were originally found. So the National Trust in particular pointed out that there would be positive opportunities for the water treatment plant to be interpreted as the next chapter in the story of the Mundaring Weir on the gold fields water supply. So this is kind a double issue pretty much in that sense. Could we hold it, please? If you don't mind, that would be better.

Indigenous heritage again, obviously we are going to have discussion about this after we finish the weighting process. But what was included in indigenous heritage assessment was archaeological issues. There was an archaeological survey done that looked at the present or that looked at the potential to find artefacts. Ethnographic issues, the cultural significance of the areas and the stories associated with them. And there is a both related to the native title as you have heard tonight. Again I won't go into this any more because I know there will be more discussion.

TAPE 1 SIDE 2

Jenny

After the break. Site flexibility and operability is an issue that is important to Water Corp in planning and designing the plant. So it relates to the planning stages, the actual design, how you physically put the plant on the site, how easy that is to do. And how easy the plant is to operate. We sat down with a group of Water Corp interviews to talk about this issue and we basically came up with eight sub criteria that would be considered.

These included expandability, what the topography of the site is like so if it is very steep and rocky then it is more difficult to develop than if it is on a nice gentle slopping flat. Where does the plant fit physically on the site. How accessible it was. How secure it would be. The fine (.58) which had to do with proximity of vegetation but also access roads. Proximity to the raw water that is being treated and how easy it would be to discharge the backwash water from the filters. So they are all very technical issues that have a lot to do with how practical that site is from an engineering perspective. And then costs. Cost calculations included both the capital costs and the costs of actually building the plant in the first place and the operating cost of how much it would cost to operate over the life of the plant.

Just before we go into the weighting process I am going to introduce Ross to you. Now is a good time to ask not for questions about the impacts against those criteria because that is what we are doing in the second part of tonight. But if there are any questions about clarification about what the criteria actually means. Because it is important that we all have an understanding about what they actually mean before we can weight them properly. Do you want to ask questions Mark?

Audience

Can you just tell me about the water treatment part being an asset in terms of the....?

Jenny

Well it is probably better that somebody in the heritage...

Audience

Basically what I am asking is they think it's an asset because it is going to be open, but I don't see any evidence on the plant catering to visitors.

Jenny

My understanding of it, and I'm not the right person to answer this, but my understanding was that there was an opportunity. Some sites have a better opportunity for it to become an educational facility or to have some kind of interpretive centre that would fit the plan into the context of the other developments that are already here. Not necessarily that it was in the plans as of right now. The other microphone is coming.

Audience

You showed a slide which said that the operating costs of the energy use of all the sites was much the same. That is not in accordance with the data that you sent. Where it says, "This will require the pipe location an artificial drainage system that will drain the entire site through a suck. The drainage water would then need to be puffed out of the catchment area. This is a significant alteration of the hydrology of the site. And will be very expensive to construct and operate. This process will also have ongoing energy requirements." Now that suggests to me that the pipe location is going to be a very expensive thing to run over and above the other three sites.

Jenny

You are going to have to ask the Water Corp, Robert, to answer that one.

Robert

What option to tackle the issue of artificially draining the run off from that area is to actually put a gravity pipe from the sump back into the catchment below the weir, or the other ways that you can lay a pipe and pump a water over the hill, over the dump. Obviously there will be some operating costs. That cost will add to the pine plantation site being far less favourable than the other sites. I think your point that there are costs that should include as part of the drainage. But in terms of the actual plant operation and

the pumping of raw water and clear water after treatment to the source, they all have similar costs. And I take your point that we have actually not included the additional pumping cost from the pine plantation. So if you want to consider that site piece, take note of that point that was raised by Bernard isn't it. Thank you.

Jenny

Just behind you Robert.

Audience

With the weighting worksheet if say biodiversity and waterways can I put them both as a ten, say? Just a question about how we are actually going to do the weighting.

Jenny

Well hold off if you don't mind, because I'm going to get Ross to take you through that. So at the moment I just want clarification to make sure that everybody understand the criteria.

Audience

I was surprised when I looked through the list of sustainability criteria, not to see a reference to the law. The law does require the Water Corp to act in accordance with commercial principals. The second side of my comment, really relates to the paper which was brought forward by the southwest aboriginal land and sea council. The issues covered in that paper don't seem to revert to, in any depth, in the paper on the sustainability criteria, would you comment please.

Jenny

I can't comment on the content of it because I have not been involved in that. But what I can say is that the issues that when we are doing the weighting, when we are considering how significant the indigenous issues are and compare with all of the other ones. My understanding is that the issues that need to be considered under indigenous heritage are archaeological, ethnographic, and native title. My understanding is that is what has been included in the assessment.

Audience

You didn't respond though to my comment about the requirement at law for the Water Corp to act in accordance with commercial principal.

Jenny

That is not a question for me, that is a Water Corp question. Take that, Ken? Or save that for after?

Audience

On three previous occasions I was even quoted a bit out of English Oxford Dictionary, and I think we referring to clause 30 of our act which refers to our prudent commercial conditions. Clause 30 of the act, if you read one line, uses those words. And that is, "a requirement by law for all corporations." Clause 30 of the act I suggest as I did before, because basically it says we have got to act in prudent commercial conditions, however, that we also can be instructed by the minister to do whatever government wants us to do. But the most important part of it is the word "prudent" in there. Because prudent basically means water is best for all, over all economic principals, not just the cheapest.

Ken

No, that is the wrong interpretation.

Audience

That is the right interpretation. And as we have discussed before, it is an issue that you and I had with this and if you wish to take it further with your legal people, I can assure you, you are more than welcome too.

Ken

For the best part of twelve months I have been suggestions to the Water Corp that they get competent advice on this matter, and you have declined to do so.

Audience

I will refer to what I said twice before, when you asked that question, the answer is yes.

Ken

Yes to what?

Audience

Yes we have obtained legal advice on it.

Ken

Would you please table that advice to this committee.

Inaudible question is asked.

Ken

I have read it. I have read it and I think I have a better understanding of it than you do. But if indeed you do have competent advice, why would you not table it to this committee, to this gathering? Are you afraid to do so?

Jenny

I think Sharon had a question. Pass the microphone.

Sharon

I just want to make an observation. I have been through this process with this particular methodology before. While it is a little bit open than the last community forum I was at about which used it which wasn't this one. I find it a flawed methodology. And the reason I find it a flawed methodology is because what it has become is a self full filling prophecy. If you read the ideologically and value based judgements that are so called scientific and they are not of a trained scientist, you apply them. No matter what we put down, the value will be latent by Water Corp by the powers that be. It is a foregone conclusion to get the site they want. I noticed that they fine tuned it because the last time they couldn't algorithmically use it. It was like hurting cats. Now what I am finding is that as we pick it. We are picking value latent things rather than actual factual things that we consider important. For example when you were laughing about the community amenity being naissance value, you know there was a lot of objection to that. You know that we consider amenity a part of that not being poisoned in your home. Oh no you can't do that, that is safety and the rest. The environment and society crosses each other. What you have tried to do is make a mathematically simplistic thing but it is filled with value latent. This is a flawed methodology and I object.

Jenny

O.K. Well we will have to agree to disagree on that. At this point I would like to introduce my colleague, Ross Blanksi from Murdoch University. Ross is an internationally recognized expert on multi criteria analysis methodology. And he has been advising us all the way through this process to make this as robust and as fair as it possibly can be. Ross is going to guide us through the process that we are going to undertake tonight which is the weighting of the criteria. So thanks very much for coming. It is actually Ross's birthday today. So I am very, very grateful to him for giving up his birthday to come up to Mundaring. Thanks Ross and I will hand it over to you.

Ross

Good evening. I think you have been sitting down for about three quarters of an hour. Would you like to stand for a moment and stretch yourself? If you want to stay sited please do so. Just have a little break. I was in bed with a bad back a couple of weeks ago and sitting was awful. While some people are just having a little break and they will be back in a moment, I just want to check out on the volume. Can people clearly hear me, or would it be better to hold the microphone a little bit further away? About there? People at the back can you hear me adequately?

Let's begin the second part of the first part of the segment. We are talking about the weighting process. May I just make a point that my involvement is very much independent. I don't live in this area. I have not visited the site of Mundaring Weir for several years. And I have no vested interest in it. So I am very happy for you to ask more questions about that, but I would like to say that I feel that I am independent of it. Whereas Jenny introduced me as international expert in the area, I don't think I'm quite

that much, I have just been involved in other criteria analysis with several processes around the city. Out at selection of the site for the outer harbour. Some extension to highways. Recently for the power line route that is going to be constructed north of Eneabba to Geraldton.

The types of things that are option choices. If you want to make a decision and you want to make the decision about the best route, one of the things about multi criteria analysis is these meetings. I think they are fantastic. There are people with their interests, their concerns, the issues at heart. And it is good to hear it coming out. It gets a bit heated at times, I know. But it is good for these things to be expressed so that they can be incorporated in the decision making process for that reason. I appreciate coming along tonight and hearing your perspectives. But I am not going to make the decision about what happens. I will take away the weightings that you provide and I will put them through some pencil mania but he suggested some algorithms, some mathematical ways of dealing with these things. And I will, with Jenny, write a report to the Water Corp in due time.

Audience

Is that then shown to people as well?

Ross

It is. So you will see what we write. And we will try to be very fair and open to all of the issues that come out. We realize that the criteria have been decided and we realize that the criteria have nearly all been scored and you will have to take away one today. So as Jenny has mentioned we are going to work on saying how important each criteria is tonight.

I would like you to weight it to say how important each thing is. We are going to be, as Jenny has mentioned, do it all individually. I want to find out how important you think each criterion is to each other one. And here I mentioned that a weight, for example, of four, means that the criteria is twice as important as another one that has a weight of two. Or is half as important as a criterion with a weight of eight. So it is actually going to be ratio scale, it is not just an order of things. One, two, three, four, five, six, seven, eight, nine, ten, eleven. We want to find out how much important than another one. I think this is being covered. It is very important that we all weigh the same types of things. The same thing. Our understanding of the criteria are the same. So just again, the opportunity, do you want to clarify any particular criteria? I will have to refer to someone else to answer it. Yes.

Inaudible question is asked.

Ross

It is his job.

Sandra

Sandra Blankly.

Ross

Hello Sandra.

Sandra

I think it is important that we take on board the issue of privately owned land and corporation owned land, whether it be Commercial or Water Corp. And that hasn't been an issue. I was a member of the social amenity weighting process.

Ross

Scoring process.

Sandra

Scoring workshop. And I was very concerned that at the end of the day what that workshop came out with was basically who lived near which side. And there were a number of people who were in privately owned land who lived near one of the sites. And they had a lesser rating than a larger number of people who were living in Water Corp or Commercial owned land or houses closer to the other sites. So I think we really need to make that protest about this process.

Ross

O.K. Thank you very much. This is a procedural thing. I believe there are some different scores that are actually going to come up, Jenny, was it? So we will incorporate into analysis three potentially different scores for that particular criterion.

Inaudible question is asked.

Ross

I am at a loss to know how to resolve that conflict. So Peter is that something that the ladies can talk... or is it the incorporated talked about? As long as there can be some mechanism for them feeding back. So that if there is a need to change in the scoring or in sensitivity analysis, we could take it into account. Some variation of the scoring is quite legitimate. Because some of these are value based judgements and there will be some discrepancies. So that is quite common thing in multi criteria analysis. Did you have a question about criteria.

Audience

It relates to what is just being discussed. I have noted that there is nothing actually from DEC which makes the comment that whether they are going to leave that site, or

whether those plans will be maintained or anything. And I think that is something that is lacking from the information that we have available to make these decisions.

Ross

Can you take that into account too. Anything else about criteria.

Audience

You may be about to explain this, but do you want us to rate everything using all the numbers between zero and ten.

Ross

The first part of your comment was quite correct. I will explain it and then I will go through some examples. Yes, I don't want one, two, three, four, five, six, seven, eight, nine, ten, eleven. Thanks for that.

And the lady before asked a question about weighting, we will be dealing with that questions in the short time too. Thank you. Next slide.

Sandra

I just have one more question about the criteria. The first one under biodiversity. The ecological value of the site, can you just give me a quick sentence on that?

Jenny

That was generally looking at... we sort of discussed it more in detail underneath under native floral and native soil as well. But it is specifically looking at the native floral and soil of the site.

Ross

Jenny has been through this, but keep in mind, when you are weighting this, that we are trying select the preferred site for Mundaring water treatment plant. Now the perspective you bring to this can vary. It can be very personal if you want it to. I encourage you to think. Again, because it is a community that is going to be impacted by that, and visitors broadly that you take it as wide as you can, perspective. But it is really up to you to make a decision on what particularly you are going to weight it as. O.K.? Thank you.

When we actually start the criteria the first thing I want you to look at and say, "Are any of these criteria not important in making a decision?" So you look down the eleven of them and say, "Are all these criteria important to some degree?" or "Are any of them not important at all?" If they are not important at all, in other words they should not be taken into account when you are making the decision, please give them the value of zero. That is the first thing I want you to do. Decide if any criterion is not important.

And there could be more than one if you think that is the case. If you can say zero or one, two, or more criteria if you want to. The next thing I want you to look at is identify the least important remaining criteria. So when you look down and say, "Look of all these

other ones, this one here is the least importance. I want to give a little bit of weight to it, but not very much.” And you give that a one. We are using relative type weightings here. And I will give you some examples shortly of some fiction of a weighting process by a may or may not. But you give that the least important criterion. A weight value of one. You may have more that are very low importance and the equal weighting, and you say one.

Then we are going to weight all the remaining criterion in relation to the least important criteria. So we will find out how many more times all the other criteria are important compared to the ones that you classify as the least important. So some you might say twice as important as that one. Some you might say three times important. Some you might say are six times more important. And we’ve got a chart of the back of the handout that will help guide you through this. And the next slide actually puts it up. So here we are. Look at all the criteria and decide if any of them have no importance and put a zero against them. You don’t have to have any here. You may have a zero or more if you want.

The next thing you look at is say, of all these other criteria there is this one, or these two are important, and significant, but only a little bit. Or they might be very important but they are less significant than all the others. And you give them a one. Then you compare all the others to it. So you look at the next criteria and you say oh this one is much more important, I consider it strongly more important than the one you gave a one too. So you say it is a six, so it is six times more important. Then you give them all ones. If you gave them all tens, it would not matter as long as they are all equal. Because afterwards I go process, I go through a process of normalizing it all so that in the end everyone gets the same number of points across all the criteria.

Audience

Have you thought of selling this technology to the Australian Electoral Commission?

Everyone

Ha ha ha.

Audience

Actually a colleague of mine actually thought about... What you are saying is that it is too complicated?

Ross

When I take you through the example I think it will slip out a little bit more easily. What I am trying to do is use it in creative. When I say creative I mean a wise way to workout what the better options are.

Inaudible questions is asked.

Ross

I am asking you to say how important the criteria are and then we will look at the scores in those criteria.

Inaudible question is asked.

Ross

Yes you do. And that is what you would call voting. Here we have said, look we have got all these eleven criteria that are important and we would like to say how important one is relative to the other.

Inaudible question is asked.

Ross:

I believe the community of the Water Corp have agreed that following on from this you will actually be doing that. So what we are trying to say is that there are lots of factors in making a decision.

Inaudible question is asked.

Ross

I have no idea. The Water Corp has not yet talked to me about this in any shape or form. I have come in as an independent person to help work through the calculation process.

Inaudible question is asked.

Ross

Your are quite right in the sense that there is eleven criteria. No, I was not involved right from the beginning with the community to work... no, no, no. So if in the process the Water Corporation has not listened to the community, then there will be some issues. I think there was some cross over ideas with criteria. Would there be somebody who could speak to that issue? I am approaching it... I have come in at the end point. In multi criteria analysis the process is vested from the beginning community actually has a say in the criteria. Please comment.

Inaudible question is asked.

Ross

Well this is... as we have explained there was two parallel processes we are working with here. One is the Water Corp's own internal sustainability assessment that will produce their recommendation. And then there is the community rating process that will follow on, post this forum. For an opportunity for people here individually and as a group to do their own rating of those sites. So this is the Water Corp's own internal process. Does that make...? This is not your process. There is a parallel opportunity to do that. The important issue is that we stay focused on the task. Can I finish please? The question of what we are dealing with here is the Water Corp's own internal system process of which they are seeking your input. The question of a rating process....

TAPE 2 SIDE 1

Excuse me – with the weighting process, if for instance, cost, I thought was very important, but I knew that all four sites come within the cost, would I then not rate it so much?

Jenny

You will then need to ask....

With the weighting process, if I think cost is important, but I happen to know that all four sites come within the cost would I then not rate it as important, because I know it isn't of importance as far as selecting one site from the other?

Jenny

I don't think it really matters too much because they are all very similar. They score the same, no matter what weight you put on to it, it wouldn't affect the final answer. So, I don't think it's an important issue there. Thanks for making that comment.

Question

Can I just get some – I'm sorry Colin if I interrupted you – about the relative values that this community process is going to have to the process that the Water Corporation did. I mean they had weighted their criteria and you say that we are doing this for them, so what kind of weighting then, or value is going to be given to our efforts tonight.

Colin

That is a very good question, really, in the end, who is going to make the decision and what criteria basis will they make their decision. As I have indicated before we generally will write a report, having looked at the evaluation of what has come out of tonight and then we will present that with the Water Corporation weights and the community weights quite separately, so that they will be quite distinct and we will send that report to the Water Corporation. The Water Corporation has to make the decision but they will also have the input from your forum that will come after this tonight and I am not sure what

happens within the Water Corporation about how they will look at all those. If they come out all the same then that is an easy decision isn't it. If it is not all the same, how important are the various other values. What weight they will give onto the voting, or weight they will give to the community weighting and what weight they will give to their own is something that they will have to sort out. They are accountable back to you and also to the Minister about this, so am I right in my comments here, Peter?

Peter

I haven't talked to them about this, although I did talk to Jenny before just sort of saying who is going to make the final decision.

If you go back to the original spreadsheet that was handed out where we got to the stage of the communities four preferences, we are now moving through, if you like, Robert's planning process to get the Water Corporation's preferred site. As part of that sustainability process he is apply community values in, which people are putting in for his process. Parallel to that, if you remember the charts that we have been using since Forum 2, you as a community are completely open to see everything that Robert is doing in his and that is what tonight is now. A bit of a parallel as Colin was saying. You can come out and say I want, 1, 2, 3 and 4 and do one as well and that will also come up in the report. So, there was two phases tonight that, as Colin was saying, at the present moment you are courting the communities input into the community paths of Robert's sustainability analysis – sorry GHD's, but Robert's planning process.

Colin

Good debates. Thank you.

I am going to go through a couple of examples now, and hopefully it will sort out. Next slide please.

OK – so you will notice first of all that this is like the sheets that you have got to weight, except that has got 11 on I have got 9 here, but I didn't want to indicate that any of these criteria all relate to a different criteria, you have got 9 – 11 and I have just put some numbers in here.

So, when I looked at the criteria that I was assessing on a particular site with the object of say an exercise, I would say – look, I have had a look at all the different criteria and I have decided that one criteria D. is the least important of them all. I want to give a little bit of weight to it, so I have given it a 1. I have looked down through all the other criteria and I say relative to 1. I think this one is twice as important, not a little bit more important. I have looked down through some of the other ones and I have decided the criteria H. down here was, and according to the chart on the back, somewhere around moderately more important, just a little bit less, so I gave it a weight of 3. I just looked at C. and I said that is strongly to very strongly important to me. When I make a decision about this particular objective I want to put a good, solid weight to that relative to this one. So it is 7 times more important. I then through all the rest of it and I did a 5. and down here, I said well, that is not quite a 2. or a 3., I will give it a 2.5. So, you can use decimal places too if you want to. So, 2.5 times more important than that one.

Right, so that is one example. Could I have the next one?

So, this one I looked down all the criteria, I am another person looking at a particular decision making and I looked and said, look Category B, that is criteria B. doesn't mean a thing to me. I don't think it should be taken into account in the decision making, I will give it a 0. Not important at all. Then, I looked around and I said, C & D, they are the least important of all the remaining criteria, I will give them a 1. each. I have decided two other factors were a little more important, so I gave them a weight of 2. Category G was moderately more important so I gave it a weight of 4. So it's four times as important as these, and then I went through all the others and decided where they fit relative to these ones. So, that one is 3.5 times more important.

This one down here was just a little bit more important than the least important, so I gave it 1.5. I have no idea if it is pine plantation or not I haven't seen the scores and it is opened up to you to weight it the way you think that these criteria should be used in making a decision.

Yes, you have a question?

Lady

Could you say some more about the normalising process, so that if someone rates everything from say 7 – 10, and another person rates them 1 – 3, how does that..?

Colin

That is an excellent question. I have actually got some right at the end that I will slip to now. I will ask them to go to the end. In this case you will notice that there is hardly any variation across here, whereas some people might have given 10's and so forth, so it is important that you know that we will adjust them. So, could you hit the End key, please.

OK. Go on a couple more, keep on going, more, more. The hidden slides, could you right click please? Right click on your mouse. Go back up one. More down here.

When we normalise it, data will be normalise, so that in the ones weighting counts in the final analysis to the same extent. We do this by, adding up the total of the weights that an individual person does. So you add them all up, then you divide the weight given to each criteria by that total and you express it as a percent.

Next slide please. So, here is an example from previously that I have put up there. I gave it a weight of 1, 2, 2, 3, 5, 7, 2.5 and that all adds up to 29.5. Fair enough. I then say, what is 5 divided by 29.5, it works out as 17. What is 2 divided by 29.5, it works out as 7 if you round it.

For example, on a slide that there wouldn't be in reality and there we can normalise it so that it is like an equivalent of saying you have got 100 points to distribute amongst all your criteria and so that will be used when we actually average in the end what everyone has been doing. So everyone will get 100 points. But the difficulty about doing 100 points, I to disjoint all your points to 100, so it is difficult to add them all up and it is also very important that we get this idea that we want to compare what one criteria is with another. So, if it is twice as important, it gets twice as much. People tend to distribute their weight around by 6, 7, 8, 9, 10 rather than have a broad range. This one tends to

get a much better range of values, consistent with what I think is true importance to it. Because, when we order something, we don't necessarily know how important one is to the next one, so if I lined you all up here now and we can get a nice line going through from the shortest to the tallest and the tallest to the shortest, it wouldn't go along in nice even steps, go, on, on, on and there might be a jump up, so the difference between them isn't quite the same and therefore when you do some multiplication it is not proper mathematics. It is a good question, it would be nice if we could do it that way, but it doesn't quite work out in being reliable mathematically.

Thank you.

Canadian lady

I am having a problem with this. I understand that you have come in with an algorithmic process so that you can simplify things and put in the box. I have got a few problems, one is – this process is actually devaluing the community consultation process, because what we have suddenly jumped to is for each one of us to make individual value judgements on the importance of certain things. The criteria listed I have just been looking at – biodiversity, potential for land degradation and the rest, does actually include the overview of some of the problems that we saw, or of the things that we wanted addressed. It has been simplified and then it has been re-defined if you look at the definitions that we looked at under bio-diversity or whatever.

The problem it is not reflective, what is doing is, because we have been screaming for more information on certain things. Like best practice plants, we still don't have that – transportation, it is not in there. A number of things that we have been asking for information on, including indigenous surveys, floral surveys, fauna surveys and the rest, they haven't been done. What we are doing is, we are making valued things, because we don't have the information that we have been asking for. We have taken this very seriously as a community and we have been ignored by that, so what you are getting is a skewed response of individual responses that can be emotional or anything else – which emotion is fine, but this is not reflective of what we thought we were doing and we have been devalued now, by making value judgments and they can just say, well, everybody thinks this is important for no good reason.

The only two things on here where we have really heard a lot about is recreational and tourism and European heritage. Those are the only two things that we have some information on where there has been consultation and the rest. So, while this is a nice, neat little box and it will fit in beautifully with Water Corp because they can skew it whatever way they want when they get done with it, to meet their criteria, it actually isn't reflecting any knowledgeable thing, so it can only be a value judgement and I feel really hard done by spending a year in forums to make intelligent decisions which I hope would be realistic and have us reduced to our individual perceptions or just our own individual whatever and I am very disappointed with this. It is nothing to do with your mathematical equation.

Colin

Fine. I don't take it personally.

Canadian lady

I find the process non-reflective of the actual greater good and it is just not there and I think it has scared this community.

Colin

So your avenue of appeal you have got this next process coming up which we, that may or may not solve everything.

Canadian lady

No, again it doesn't because we still haven't had the information.

Colin

So, all I can do at this stage is as I have come in. Are you the community liaison person, is that right, do you have something to say about this. Do you want to do it now or later?

Silence.

Colin

Yes, the point about actually giving weights to them is that say, this one here is given 7, even though and this one is 1. So even though one site might score poorly overall, but scores a lot better.

In some, what we will do later on we will look at the environment from the different sites and we will say, is this site here better than this one. We will give it the weight that is there, so it will actually be incorporated into the decision making process.

Canadian lady

Which is defined by Water Corp's employees, and that is the other thing.

Colin

You are talking about the scores.

Canadian lady

I am talking about the actual criteria for each site which I tend to think, oh well you wouldn't have any information.

Colin

I regret that you have reached this point.

Canadian lady

I find this whole regrettable, a year out of our lives.

Colin

A question here.

Male

With banding around the word environment and biodiversity they are actually very different and it is something we need to be clear about.

Environment, living things, they are physical, biological and social surrounding and the interaction between these and the social surroundings of man are his aesthetic, cultural and economic and social surroundings to the extent that these surroundings directly affect or are affected by the physical and biological surroundings. That is totally different from biodiversity.

Biodiversity in this case is a very narrow term, which has been used specifically for native heritage. So I am confused because I go with Professor Bolton who said *“we must not despise cultural environment as part of our heritage, cultivated environment as a result of the work of post-1829 West Australian put into creating this society is something to be cherished”*.

So, I am confused about, well, I am not confused I am aware of the fact that as Sharon says, this process has narrowed environment down to a very, very specific native biodiversity criteria. That is my worry.

Colin

Thanks for expressing your concerns.

Male

Just let me finish that, how do I vote, because I value Professor Bolton's definition. I value your Water Corporations' definition.

Colin

The voting is something the community is doing later on and I am not directly part of that. What I am trying to get you to say is when you are making a decision about what site is best, to make that decision, you have got lots of criteria, so could you indicate what you think are most important for all those criteria.

Male

Yes.

Colin

Jenny, could you.....

So, you are saying you did mean to say, or you did say – native?

One question, yes?

Male 2

As part of your presentation, could you please show us the next slide, how do you crunch those to examples together to show, so what happens before it goes into the Water Corporation black box.

Colin

To go through that is quite involved and I am happy for it to be obvious, when I write the report up I will include it and put an Appendix on that issue, so you can actually see it.

I will put an example in there for an actual calculation, would that be helpful?

It can take quite a long time, there are lots of different MCA algorithms and we are going to be using what is called concordance analysis to do this one because it is a particular type of data that goes into it and quite a lot of concordance analysis.

OK – so can we go back a few slides, please. OK, so one more back, I think, just one more back, so we are going to be doing the weighting using that chart on the back to help you, we don't want an ordered list of weights, so please don't go down and sort of say, this one is 1., this one is 2., this one is 3. and this one is 4. and this one is 5. and this one is 6. Because it is not ratio scale, so we want you to use that comparative process.

The next one. So, is there any more questions specifically at this stage about what you are to do on the sheets? Could you get that back thanks. OK, right.

That one there please. OK. So, just going through it again, you have got the sheets in front of you, could you indicate first of all, if there is any criteria that are not at all important in making a decision and put a zero next to those. If you think any criteria, any one or any more are not important at all, please indicate a zero. Not important. You then look at all the other criteria and say, of all the other ones, which is the least important. You may have two or three, 1, 2, 3 or least important, or all the same importance, you just give them a value of 1. So, it is really important that you go through step. First of all, have a look down - right I know OK.

Jenny, the sheets at the back isn't it? – So, there is on the back, on the second last page you have got the scale and on page 7, you have actually got a table to use for the weighting. Page 7 there is a table for the weighting, would you please turn to page 7 and do the weighting there. Jenny has brought to my attention, that we have actually put a number up there, that is a number not a name, so that you can actually see me that if you ever wanted to make sure that your weight has been entered into. So, keep a record of your number. This has for example, got a number 39 on it.

Please ask any questions you have about this weighting process.

Silence –

Good, do you want to keep the rest of it? Thankyou. I am going to personally take these, they are not going to the Water Corporation. I will be taking them directly and entering the values in myself to make sure the operation goes ahead.

Silence

Just – I think Ross wants to say a few words.

Ross

I would like to say thank you very much. I know this process has got a real sense of challenge about it for lots of people, but I do appreciate the way in which you have been receptive to talk about things and to listen and I wish I could make the decision making process simpler, but thank you very much and before I leave I would like to wish you the best in the next stage, I don't know much about what you are going to do now, and I want to just check. Has everyone been able to weight the criteria?

Is there any forms outstanding? We can only accept the forms tonight, otherwise people from outside will come along and they haven't heard the criteria and haven't been through the explanation and they might order them rather than weight them and it is better to handle it tonight. OK.

Is there anyone else who wants to hand a form in? Was that a yes. Oh, there are a couple more coming. Into this box please, thank you very much.

OK, thank you very much.

Colin

OK, we have got a bit less time than we had anticipated, we have got now an hour or about 50 minutes. The plan now was that we would work our way through each of the four sites. Robert is going to walk us briefly through a more detailed fly over of the four sites, we are also hoping that if you have questions or issues you wish to raise about any one of those four sites with some of the specialists here you can do that, or any issues you wish to raise just about that site, you can do that as well.

So, what we will have to do is essentially allocate about 15 minutes per site, so we will work our way through site by site and I would prefer to go site by site rather than jumping all over the place. So we will work out way through site by site.

Robert is going to show a fly over of the four sites initially, and then we will work our way through each site, one by one. You may want to make comments as well as ask questions. I am happy for people to do that, but I would ask tonight that you keep those comments brief, simply because I want to give as many people a chance to raise questions in a short time frame.

There is another forum on the 20th August and we can continue this discussion about sites. So, we won't be asking or expecting a rating of any of these sites to be done tonight.

I would hope that the indigenous issues would come up as we discuss the site by site.

Steve has just alerted me to the fact that there are DVD copies of this fly over if you would like to take one with you, or if you would like take one to share and show with some of the groups that you are part of. See Steve, I am not sure how many copies we have of that. So, there is a DVD copy of the fly over. What we will do is walk through a fly over of all four and then we will come back and go site by site.

Robert

For those who don't know me my name is Robert, and I have been involved in this process for the last 12 months. I know that there are things that you can see, but obviously it would be better actually if you can fly over and have an overview of what this site has. This fly over is an exercise of approximation of what it looks like if you are flying around in a plane. It gives you something that you won't be able to do if you actually walk on site, but it is just an approximation and we will try and give you this information to help you make a decision on the site.

What I am going to do is do a very brief fly over of all the site and then you can go on a side by side basis and then you can talk about each site when we have an individual fly over.

OK, site fly over. What you can see here is we are flying over from the north down to the south along the Mundaring Weir Road and you can see that you are coming right to McCallum Road, so we are flying southwards and just in front of you, you are starting to see the O'Connor site and that is the Mundaring Weir.

So, we are sort of heading south and you can see the sort of red line the buffer zone, and its occupying the area just between the junction of Firewood Road and Mundaring Weir Road, so this is a very brief fly over. The access is from Firewood Road, there are some properties along Mundaring Weir Road on the right hand side. So, we are now over the O'Connor hill and we are coming along the Mundaring Weir Road, that is Lavender Patch Cafe and on the left hand side is the DEC site. Fred Jacoby Park is there, you can see the buffer zone sits over the park and there is Allen Road, that is the roundabout and we are coming down to the Village Weir Road and the Mundaring Weir Hotel and we are heading towards site 1 and we can just sort of see is the north ledge where we are still pointing southwards.

The bulk is south and now we are turning around and you can see the south ledge just coming into view and from the right to left basically you are looking down the valley towards the Weir and this site 1, is located below the Weir. Currently it is most of the area is graded, a pretty constrained site and is south of the Helena River. On the north side you have the Pumping Station 1 Museum and the Weir, I think most of you would be familiar with the area around there.

What it does, you can see the red line is the pipeline, that these two transfer the raw water to each of the sites. So, we are coming over the Weir and then back to the Allen

Road and we will start flying towards the pine plantation site. The National Park centre as you can see is just south of the DEC site, and the Kookaburra Outdoor Cinema and the pine plantation site is just north of the airstrip and the plant is located mostly in the pine plantation area. So, what we do is that we have seen the site and we are just trying to rotate our view and then on a north to south orientation and then we will fly up to Perth and to see every one of the older sites as a plain view.

So, pine plantation, DEC site, this is still an elevated view, but we are actually flying upwards and getting higher and higher and you can see all the sites as we are trying to rotate ourselves on the north/south orientation. OK. Can you stop there just before we finish.

OK – pause there, we can't see it, but basically what you end up with is you take the DVD and pause just before the end and you can see everything in plain view. That is really a very brief fly over, but it gives you an idea of some of the areas of concern, the proximity to the private land and some of the key public amenity areas and the roads and things like that. OK, we are now going to go to each site and what we do is, we just flying over in a 360, it just goes around and around in circles and you can see those in much greater detail.

So, what we could do, which one would you like to look at first. OK – site 1. It doesn't show it here because what we are proposing to do is that this will just locate a filtration plant and the chlorination plant will be located at the other three sites, so the buffer zone will be applicable to the other three sites rather than this one. The chlorine will not be located at this site, it is just the filtration part of the plant. So, you are looking more towards the Weir and you are now looking towards the Museum and the wall is on the right hand side, so we are just rotating into 360 degrees. These are some of the filtration plants, some of the buildings are just here to contain – I am not sure what it is, I have got to try and remember.

Yes, the aspects ratio is about right.

Silence.

You are right, the corridor will range depending on how many pipes you have got to put in, for example, the pipe leading into the pine plantation will have three pipes basically, the bore water pipe going in, no it will be a very big pipe – no, no, no – what you have is you use the twin main which is the Kalgoorlie/Mundaring main that currently exists and then you use it to transport by road and then it does into one big pipe. It goes to the pine plantation, it treats the water and when it is treated and disinfected, you will then take it back to the twin pipeline and you use it to translate the Sawyers Valley tank.

However, for pine plantation you need another pipe leading out because of all the drainage and discharge, so you might need to go along Allen Road.

Male voice

We will need a contingency pipeline which will be a similar sort of size.

Robert

Yes, correct. I called it a third pipe and basically the third pipe is an example, it is the DEC site and you need to have a third pipe to come in to the existing pipeline of the metal system so that you can actually bypass the Weir and the treatment plant and transfer the water directly to the Sawyers Valley tank. This is really then that the Weir is not possible to be used, or even to be treated, or if the treatment plant is either bypassed or if there is a significant power shortage that will render the treatment plant unusable for a significant length of time. We need a bypass to allow supply to continue to the Goldfields.

Yes, Max?

Max

Another point – will the dirty water going up to the residual beds at either of the other three sites?

Robert

Yep, what we will do is that you use the existing twin pipeline. Yes, there is a need for a pipeline to transfer the sludge which is the wet sludge to the sludge bed and all those other sites, the DEC, O'Connor and all the pine plantations.

Max

And I presume when you are showing site 1, you also mean DEC site, O'Connor site and pine site for the drying beds are part of site 1.

Robert

Right, Max, you are right. That is actually a combination of the filtration plant, located at the site below the Weir and the options of having chlorination at the other sites, DEC, O'Connor or pine plantation.

Lady

I believe that if you have site 1 with the chlorine treatment at DEC site you don't need that additional pipe going from site 1 to DEC, is that right?

Robert

It is correct. You don't need what is called the clear water or the raw water pipe, but you do need a pipe to transfer to the wet sludge to the sludge bed to be located at DEC. But it is going to be a smaller pipe, which is basically the sludge is about 10% of the total treated output, so it is about 10% of the bigger pipe, so it is not going to be a huge pipe. But you still need a corridor to put that pipe.

Lady

Can you ask then the question, why we were told that we didn't need that extra pipe at the workshops last week.

Robert

I think the question which was asked related to that contingency pipe and you really do not need that pipe, but you need a pipeline to transfer the sludge to the drying beds.

Lady

So, how big would that one be?

Robert

I would say it would be 10% of the big one, which is 1400, I reckon it would be about 200 – 250mm diameter pipes.

Lady

So, where would it go?

Robert

Basically, from the treatment plant below the Weir you have to transfer the wet sludge to dry at the sludge bed at the DEC site. So, you need a small pipe, I reckon it would be about 250mm size.

A smaller pipe will require less area or corridor for that. I suppose a big one, 1.4m diameter is probably as tall as me.

Lady

So, that technically is the least amount of pipe for that combination.

Robert

Yes.

Lady

Thank you.

Colin

Any more questions on site 1?

Karen

You talked about the height of the buildings, I believe the lime tower is supposed to be 10 metres is it, lime storage? So, if we are looking at the sites, would you point out where that is on one of the sites so that we can have a comparison because there is a

lot of those tanks and things which will also be more than several metres high won't they. Can you give us some indication of heights when you get to them.

Robert

Yes, I think there is an existing. I don't think it is a lime storage, I think it is ammonia storage tank. The existing plant is probably a very sort of – I don't know the exact size, but you can see visually where it is located. But I presume it won't be as high as the tank that we propose to build at the site.

Karen

The water storage tank for the treated water, it shows a tank on each of the sites, how tall would that sort of tank be?

Robert

I think at least about 10 metres, so 9 – 10 metres high.

Karen

So, what capacity would that be?

Robert

I would imagine it would be about half the size of the tank that you got at Sawyers Valley.

Karen

Those ones are 50 megalitre.

Robert

Yes, 50 megalitres.

Colin

Any more questions or comments about site 1? People may want to make a comment or highlight some issue.

Male

My comment on site 1 is that some of the disadvantages having been noted about it is the heritage and the historical aspects of that particular site and I have actually lived on Weir Road for 15 years and my view has always been that site 1 would be the best position for it from the viewpoint that these aspects could be seen as potential features rather than negative aspects. They could be turned into an education centre and the tourism aspect of it could be actually incorporated so that the treatment plant, what is seen as an industrial centre which was lacked by the landscape could actually be

incorporated into the overall tourism aspect of the dam site and expansion of O'Connor's vision and heritage and tourism values could be appreciated from that aspect.

Robert

Yes, your comment is right that if we choose site 1, we have actually built something that actually fits into the environment.

Colin

Can we have a look at site 1 – the aerial view.

Distant voice

Robert

I think we can see the Weir wall and you can see the

The chimney stack is definitely going to be taller than what the tanks are shown.

Yes, yes.

Colin

Any other questions or comments on site 1?

Male

Inaudible

Robert

Yes, you are right, the site 1 is visible from the north ledge and the south ledge and the golden view.

Colin

Can we get the mike, it is hard to hear? and we want to record it.

Male

This is just a schematic block diagram. The plant is not actually going to look like that is it?

Robert

It will look pretty close to it.

Male

I have got a plant at home that definitely don't look like that.

Robert

We actually got our contractor give us a schematic of the actual 3D diagram, so what is expected to be put there, but we are currently going through this water treatment process if our operations are trying to determine what is the best process.

It might not look like that, but I think we actually use the worst case scenario in terms of space and type of processes that we expect to put in there.

Colin

Karen – and then we might move to site 2.

Robert

I think we think that we might not put is a fluorescent looking pipe on the tank, it won't be fluorescent and it won't be radioactive. I am talking about this pipe here, it won't be fluorescent – I think it is just that we lost. We do have a colour for the pipe.

Karen

Inaudible

Robert

I think you need to have a clear land for that plant and I mean where we can retain trees we will try and do if it fits within the infrastructure.

Colin

One last question on site 1.

Male

This is probably a question across the board of all the sites. The government's just brought in a new system called the Greenstar which looks at recyclability of materials that are going into the building, environmental impacts and carbon emissions that certain products put out. Are we looking into making this a Greenstar building?

Robert

I didn't get your question fully, can you repeat your question?

Colin

I think the State Government has introduced a new programme that requires their commitment to recyclable construction material in terms of the construction of the building.

I think the question was how that can be accommodated.

Robert

I am not sure whether I can answer that, I think if we can use recyclable material we would, but I think you have got to look seriously at where we can save energy in terms of operation where we have long term benefits if we operate this way and for 50 years or more then those benefits then can be realised. But I think perhaps if it is just using those building material that has got probably very little embedded energy then probably there is value in there, but I think if we can find efficiency in operating the plant where we can see real gains, that is where we will probably be looking at.

Colin

OK, can we have a look at the DEC site? and any questions or comments or issues you want to raise.

Robert

Yes, this is just a 360 – Allen Road is there and you can see that the Kookaburra Centre and there is a top right hand corner the Forrest Centre is just a bit further south of Allen Road. That is the Mundaring Weir Road. We try and locate the chlorine storage – this is the north end of the site, we try and locate it here so that we are getting as far away from the public amenities, like the Forrest Centre, the Kookaburra Centre, but also not such that it will impact on the cafe patch and that is why that sort of buffer zone that is probably much more acceptable.

But we can still play around with – where are we now? This is looking from north to south of the chlorine storage there and the treatment plant is mainly located in the southern part of the site where the areas is more degraded than the north side and –

Colin

We will just grab the mike if we can.

Robert

Chlorine is just located just south of that, much better vegetation is located south of the track.

Lady

Can that pristine in the north with the gully, can that be annexed out of the site?

Robert

We will probably – you are correct that area is quite pristine and also the terrain is not ideal for any part of the structure, so even if we wished to we probably find it difficult to actually put things in there.

Lady

Could it be annexed out of the site, or will it be fenced off into the site? That gully in the pristine area, will that have a big cyclone fence, fencing it off from the surrounding bushland so any animals around that gully can't get out and other can't get in, or could you annexe that off.

Robert

I'm not sure whether I can answer that question now, but if we could, we probably would and we would try to put it outside the site.

Colin

Any other questions or comments? Maybe people who haven't had a chance yet.

Jenny

Just looking at the site there as you are driving along Mundaring Weir Road going south – don't move that any more – up onto the right hand side there, your vision from Mundaring Weir Road would be of completely bare land. There is obviously no landscape or anything on that because this would come from a fire, so I guess the complex would be surrounded by a very high cyclone fence, probably with real security-type fencing, so your vision along Mundaring Weir Road will be of a sort of a Bandyup security complex. Not very visually appealing when you are coming into Mundaring.

Robert

Yes, Jenny, that probably is required to maintain security to our site.

Distant voice

Razor wire?

Robert

Yes, we could put razor wire if you wish. This site is going to be of national significance in terms of security and I think security is a very big issue for the Water Corp and I think we will put adequate security measures to ensure no one is invited into the survey who could jeopardise the operation of the plant.

Jenny

Robert can I just clarify – you said Lavender Patch which is not only cafe, it is a residence as well, so the Lavender Patch – just so that we know we are comparing apples with apples – by my measuring Lavender Patch and Bundelier are the closest properties because they would be in the zone. Is that right? Of all the sites, these two would be the closest.

Robert

Lavender Patch Cafe will be outside the chlorine buffer and it can be located outside, whereby appropriately pushing the chlorine storage as far east to the site as possible. If you want we have a detailed map of the chlorine buffer. You can see that it does not sit, or Lavender Patch Cafe just outside the buffer.

Gentleman behind Max

I'll be nice to you Kevin. If site 1 is chosen, is that the relative location of the drying beds for site 1?

Robert

It can be located to suit, it probably will be located in the degraded area which is more in that area, but the chlorine storage will be almost exactly as defined.

Gentleman

That is my next question. If the DEC people stay there working, would not putting the chlorine plant there be a risk for them?

Robert

It is, it has got to be a risk and it means that we have to actually buy the land.

Gentleman

So, would that not be a very significant reason why it can't go there?

Robert

It could also be a reason to not go there. Yes.

Another Gentleman

Not heard

Robert

That is a question that they can only answer. I mean, we haven't really chosen the site yet, until we chose that site, then we can get into discussion with DEC and whatever they need to do with accommodating the existing occupant of that site.

Miles

We are looking at the area, but I am concerned that these things here that appear as little thin red lines are in fact, probably wider than this room, because they need two pipes this size and a third pipe along these things. And so to build those things you can have this huge line and what we don't see if this area here, that joins it up to the pipeline which is coming through – I think National Park – is that right? I think this land is National Park.

This land here is certainly National Park.

Robert

I think we are locating south of that National Park boundary.

Miles

And the other thing I am not sure about is the tenure of this land. Can you just clarify the position?

Robert

Yes, DEC or this treatment plant will sit on land that currently is owned by DEC. The northern part is under State forest and the southern part is owned by Water Corp.

I can't quite confirm I think it is.

Colin

Can we just get the mike Ken, otherwise we don't get it on the tape.

Ken

The bottom quarter is freehold DEC from east of the boundary is all freehold DEC, from about the middle of the drying beds up to that way, where it goes through like that and that bit there, is Water Corp, the rest of it in there is currently State forest 7, allocated to DEC for depot use.

Colin

OK – there was a gentleman here who had a question.

Gentleman

I am just wondering how the impact of those settling ponds or drying beds on the southern end would have on the Discovery Centre on Allen Road as well as the Kookaburra Cinema. Is that going to have lights burning 24 hours a day. The chap up there now has trouble with daylight saving let alone how we would go showing a picture up there at the Kookaburra Cinema and things like that. What impact that would have on children that don't look left because you are going to see a big settling pond, just put blinkers on their left eye so they keep looking to the other side. I am just wondering

what the impact would have visually. Never had children to go up there during the course of the day, you know.

Robert

In terms of light impact, we need to have some level of lighting, but not to the level of lighting that is needed to play AFL grand final, but it is really sufficient I suppose close to street level lighting. It is enough to provide security to operate safely, but the reason why I try and move it as far north as I can is

TAPE 3 SIDE 1

Inaudible question.

Colin

Listen, I mean I guess what we are dealing with is a different interpretation about what information was to be provided.

Lady

Where does this leave us with the information that hasn't been provided, the issues that people have raised tonight. Where does that leave us with making a decision?

Colin

I guess it would be important to clarify what information you still feel that is required by the collective group of people here to enable you to make a decision. The suggestion that we have on the table was that we've now got a period through until August the 20th when there was going to be another forum. And that forum was to essentially to clear things. Was to provide an opportunity for people to do an individual rating of the four sites and to intend to work as if there was some collective or consensus feel about the site. The timeframe we are working to is about the end of that week in August which is Friday August 24th. What was going to be suggested tonight was that we've got the rating sheet that we are going to potentially take away with you tonight. We would have a forum on the 20th to consider that rated form individually. Then maybe we could try to work as a group to see if was a shared view about those sites. Thos individual rating forms would be returned by August 24th. Data Analysis of Australia which is the research company doing interview analysis of those ratings. And so we would have individual ratings, and consensus rating that indicated which of those sites would be preferred.

Well I guess the question we've got to ask is it is important to identify what information is still required and if you feel you are unable to complete the individual rating without that, then that information has to be provided by the 20th. Thos people who feel they have enough information to do an individual rating can do that individual rating. It is very clear that there are a large number of people here who do feel they have enough information

and have indicated willingness to make their views clear in a rating. And there are other people who clearly don't. So we have got to blend with that. We've got to try to accommodate both points of view. Clearly that sort of consensus or that accommodation is not going to suit everybody.

I guess what we are proposing is that those who feel they can do an individual rating now, may do so up until August the 24th when that rating form has to be returned. Those who want more information, I guess the Water Corp has to try to deliver that by August the 20th at a forum with those who wish to work through both an individual rating and a consensus rating would come together to do that. We've got a difficult dilemma here recognising that there are a substantial proportion of people who do want to indicate their preferences and others who feel they need more information. And essentially both positions are valid. And it is not my job to say well you do one or the other. But to try to find some solution. I guess that is what I am proposing. I know it is not going to suit everyone.

Well the problem we've got with that Sharon is that everyone has a different interpretation about what that was. No, we are talking about different things, you are talking about the indigenous....

Sharon

Well we are definitely going to do ethnographic survey anyway. We need to do one.

Colin

When is that likely to be available?

Sharon

When is the next forum?

Colin

August 20th.

Sharon

Well we haven't even done it yet, so.... Until we sort out the people who are going, we can't guarantee it at the next forum. Maybe two months.

Colin

It is 9:35 we have reached the difficult high-tis at this point. Yes Karen. Steve can we get the microphones please?

Karen

The point I raised earlier about the DEC information. I think on the website it says that it would be provided by about the end of July. So I am just wondering if we could get an answer when there is something forthcoming from them?

Colin

So you are saying there is information on their site that you feel you don't have?

Karen

Yes. That there is no information from DEC. There is no feedback for the stakeholders that I have been able to see. And whether there is information about the residents who live in that immediate area.

Colin

So you are saying that information you see has not been provided? And you are talking about in the stakeholder, the summaries of the stakeholder feedback?

Karen

Yes.

Colin

It says that that was said to take place?

Karen

It says that the information should be available about the end of July.

Colin

Yes, yes. There is a gentleman just here, Steve, can we get the microphone to this gentleman.

Gentleman

Just on behalf of DEC, we have actually been consulted on that proposed site. I guess our position is that until Water Corp actually makes their final recommendation on what the site is, well that is when we actually look from a serious perspective as to where, if you anywhere, we would move. And that would sort of be a topping that we would discuss with Water Corp and obviously form part of the assessment process as you went down the track. So no decision is being made by DEC in terms of where we would move or if we would move. That flows from what the site selection process actually throws out.

Colin

But it seems to me that we actually need that information to complete our decision. And that if you actually wait to make a comment you are waiting for the decision to have been made.

Inaudible question is asked.

Gentleman

All those sorts of issues. So you know obviously if we were to have that site selected by Water Corp and all the parties signed off we will assess, we would need to go to another site for our operations to be undertaken. That is just the given.

Colin

Diane.

Diane

I have seen some information about the DEC site that I think we should be privy to as well and this is what I asked for in the small community forum. It is in connection with the narrator nature and those eco education programs. I have seen that they have 55,000 people a year and I would like that information to be fed into, fed up to the people too, please, to help in their decision. That is one thing. I have also seen a letter which has been set by the Perscial Strategic Market Group wanting to revitalise the tourism drives. I don't know if you are aware that between Mundaring Weir, I'm sorry between Mundaring and Kalamunda, the state's tourist drive exists. And that is going to be revitalised and the letters come from Perscial Strategic Marking Group to the affect that they would like that to be taken into consideration as well. The Water Corp has only just got it today, but if that could be fed into as well as the DEC narrator nature information please.

Colin

So Diane you feel that information is required before that site can be realistically considered?

Diane

Yes.

Colin

Can I get some indication from people of how many people feel that you need more information on specific sites before you can realistically do a rating process of the sites? Thos who feel you need more information, give me some indication.

Brief pause.

Those who feel you have enough information to do a rating...

Brief pause.

I guess you can see the dilemma we face. I guess that having to make some decision on my feet my feeling would be that we need to try and accommodate both points of view. We've got a timeframe until the 24th of August. It may be possible, and I haven't broached this with the Water Corp to extend that to enable more additional information to be provided. However it does seem to me that there are people who feel they have

enough information to do a rating and I would be keen to enable them to do that. Those who don't it is important to know precisely what additional information you require and the commitment from the Water Corp to deliver that as quickly as possible. From my point of view as an independent facilitator that seems like a compromise position, that I'm not sure we can come up with a better one at such a late time. So I guess that is what I am proposing. Is that those people who feel you do have enough information there is an individual rating form there that the instructions are on there. It doesn't need to be back until the 24th of August. Those who feel you don't have enough information we need to try to insure that information is provided to you as quickly as possible so it can be discussed at the forum on the 20th of August. And those people at that forum can do an individual rating and/or a shared rating of the four sites.

Inaudible question is asked.

Colin

No. I think what we need to do, and I will have to have this discussion with the Water Corp to try to get a timeline that was consistent with both. Otherwise it is pointless. Without knowing that, clearly there is some information that needs to be provided. Maybe it means that the timeframe to complete the rating has to be extended. And that would be my preference. So instead of saying 24th of August we have to adjust that to a time frame that is going to suit the adequate provision of the information. Now the problem with that is that the forms people have here tonight have a date on them already, on the 24th of August. So that if you take, we will need to inform you of a revised date for submission of that rating. And it would clearly be later.

Well the other option is we can, and I will again, this was another option we can mail them out to all the registered participants when those dates are finalised. And that is probably a preferable option. That was we get a date for completion based on what timeframe the Water Corp can establish. And I think John is right that from my point of view.... Otherwise I'm going to have the lack of clarity about dates. So if you are happy, what I would suggest is that we don't distribute those tonight, but as soon as possible we need to negotiate on the time frame and then that rating form gets emailed and posted to everybody with a final date for submission. But we keep the forum on the 20th of August. And I am going to have to make an executive decision on that.

Inaudible question is asked.

Yeah, what I would suggest is that it is just over there and you are more than welcome to have a look at it. And in fact clearly we are going to need to change the date of submission.

Inaudible question is asked.

Yep, just a couple of quick... Ed and, I'm sorry I've forgotten... Steve can we just get a mike for Ed please?

Ed

Colin, is there a process for registering who has voted and who hasn't? How are you informed the process....

Colin

We would try to keep it as simple as we can. Essentially you would need to include your name on the rating slip. The rating slip will go directly back to Data Analysis Australia, not to me or the Water Corp. They will do an independent analysis of that and cross reference the names with the list of registered participants so that there is only one rating per person. Is there another question?

Female voice

Can you just clarify what you mean...

Colin

The question is a bit hard to hear. Just so we can hear the question.

Female voice

Can you just clarify what information we are waiting for.

Colin

I think that is precisely the issue and we've got some record of that but I think what we need to have is a mechanism to identify that. And I guess probably the most efficient way to do that is to communicate that to me. So if there is information that we haven't already mentioned on the tape that you believe you still need, then I really need to know that probably within a week. And I am happy for you to call me and talk about that rather than have to email it to me.

The question was, "would all the additional information be available to register participants?" And my guess to that would be yes it would need to be. That additional information would need to be consolidated and collated. The dilemma comes in terms of knowing whether from the Water Corp's position if they can do that, or the forum on the 20th. So that is an uncertainty. Yes Sandra.

Sandra

Could we.... I don't when I attended one of the workshops, the biodiversity one. We were given these maps and they came with a handout that had a table with details about clearance and things, which was very valuable. They covered areas like the footprint of the pipelines needed. If anybody wants them I suggest they ask the Water Corp for a set of these. It actually shows you the footprints quite substantially the biodiversity of the sites.

Colin

Do we have those here, Steve? Can I just say, everyone that registered would have gotten one of those in the mail.

Sandra

Did they?

Colin

They should have. I noticed there a few people that registered tonight. So if you didn't get one please come and see me and I will give you what was mailed out.

Sandra

Are these the same ones? Because these aren't the same ones that we had. Community amenity one, these were the biodiversity ones.

Colin

Full set was mailed out to you.

Sandra

Alright.

Colin

Just aware of time. So I guess what we've got is we've got a record of some of the information still needed. But I would ask that if there is more information that you feel you need, if you could communicate that to me and then I will make sure that is passed onto the Water Corp. The other problem we have is how long it will take them to put that information together. So we will need to communicate with you about that timeframe. It is well over time and we have ended up in a rather haphazard way in just hoping that what we have come to is relatively clear. So that in a sense we have time frames that are a little uncertain. Are there any quick questions about what you want to ask of me about we have come to?

Brief pause.

OK Those people who have taken the registration form be aware that there clearly will be a different one that will be emailed to you with a different date. Thank you all for coming on a cold night and staying the whole time. Thank you all for your contribution.

TAPE 3 SIDE 2

Robert

We also try and provide some buffer between the Mundaring Weir Road and the plant.

Colin

O.K. Another questions or comments just on that site? We will have a look at the next site if we could.

Robert

O.K. On corner site, in terms of the site boundary it was decided by a group of you guys going out with me sometime in June or July... June. And we agreed that it is almost like an L shaped site and the land, the junction of Firewood Road and Mundaring Weir road be excluded so that we can provide that buffer zone between the residents located west of the Mundaring Weir Road and the site. What we are going to have is the inlet or the entrance of the site is along Firewood road? (Flood?) points will be ordered into the pipeline access coming in to the top end and then it will feed in gradually in the north-westerly direction ending up in the slush pit and then the chlorine storage there and then the tank on the northern end of the site.

If you have a look again, that is what I am trying to say. We try to exclude that area from the sight, as property is very close by there, so we chose to try to keep the site away from the private residents as much as possible. And likewise we are actually moving the plant as far east as we can. But then you know where you've got on the eastern side, lots of the vegetation are much better condition than the one full of... just close to the tracks it is located along here. That is the track that currently runs somewhere just on the western side of the mountain, of the site boundary.

So it is basically, water will come in, the raw water will come in here and by gravity retreat, and we end at the top end and it connects back to the pipeline along Mundaring Weir road.

Colin

Any questions? Yep Fiona and then we will go to Tony and then up the back. Just over here Steve, thanks.

Fiona

Could you show the properties north of the chlorine tank?

Robert

Ummm. I don't think we have.... We have....

Fiona

There are several properties close.

Robert

This is just perspective of this 360 view. But the property north of this plant site is about 600 metres away along Mundaring Weir Road.

Fiona

Because I know they are quite close.

Robert

Yes about 100 metres away.

Fiona

I wanted to point that out to people because they may think it is a long way away....

Robert

Yes it is about 600 metres.

Fiona

Actually very close to quite a few properties.

Robert

But this site, the properties, the junction of Firewood Road and Mundaring Weir Road, there is one here, and there is one here, and there is one for the south. So there is property here, here, and there.

Fiona

Which site was closer to Lavender Patch and to Bandelier, could you clarify that. Which are closer?

Robert

If it goes on Lavender Patch the DEC site is closer.

Fiona

Thank you.

Female voice

Robert, I know that you said you had left that corner off to try and screen the plant from the residents there. Because of the slope of the hill, it actually makes no difference at all. It doesn't screen the plant at all. I just wanted to make that point.

Robert

Yes, yes. Right. What happened is that I haven't got the contours, but the lower spots in the area is that there is a creek line that runs along Mundaring Weir Road, almost just on the doorstep of all of these creek properties. But there is also a creek line that runs along here. And then basically the land actually starts to get high to the west side. Then it starts to rise up. So what you might have, although you try and screen them, there is potential for these properties to actually see it is located on high side and there is nothing there to really screen you from the treatment plant. So it is something we have to

consider in terms of the regional impact on the property. Private property is located along Mundaring Weir Road.

Colin

Just get Karen and then...

Karen

Just out of curiosity to get some perspective, how many catastrophic chlorine accidents have there been in Australia since we started using this stuff to keep our water clean? By catastrophic I mean dead people, seriously injured people.

Robert

Ummm, Ken?

Ken

None at all. So far there has not been any incident in the Water Corporation operator site, that there was any incident of chlorine that killed people.

Steve

Just to clarify that if it was site one below the Weir wall, the chlorine thaw and the drying bed would be in that position. How much of that site would be cleared? And also the same for DEC site. In terms of overall footprint.

Robert

In the document, in the maps that we made out to you guys, the maps showing the footprint impact just to the sludge pit and the chlorination building and it is all included in the photo footprint for site one. I have drawings, if you want you can actually come and look at it here.

Colin

Just the intent. What was it, a quick one? This site looks quite substantially bigger than the other sites that we have seen.

Robert

Yes it is.

Gentleman

Is there a reason for that?

Robert

What it means is that we want to try to allow ourselves room to try to locate the plant as best as we can to avoid the impact on nearby residents. But also to try and see if we can fit the plant into using the terrain, the contours as best as we can. We need that size.... As you can see not all of these are being used. And we only use what we need.

Gentleman

And where does the pipeline go through there?

Robert

In terms of the raw water, you have to take the raw water from Mundaring Weir and you have to transfer using either two pipelines.

Gentleman

Do you really think pipelines going to Firewood Road, the other two cross it and so do the ones...

Robert

The blue line is the existing pipeline. And what you have is that pipe, as I mentioned, you need to connect to their environmental system. And bring it up here. You can either use two pipelines to transport raw water or the new pipe. And you have to take it along Firewood Road, and then feed it into the high end of the area there. And then at the top end you can see that there is a red line from the tank that sends it back into the twin pipeline. So raw water goes in, that is treated and then it goes to the tank there and then it gets fed back into the system.

Colin

Last question, Miles just yet. Yeah I'll come back then Diane, I'll get Miles then I'll come back. Just a quick one Miles, I need to wind Robert up.

Miles

Now this is beige. From what you were saying does that mean that you can include a lot of the existing... there is a lot of space, could you include the existing trees that are here in this area here? And could you relocate the grass trees which are here, somewhere within the site? And with this boundary at the end be contracted to fit the site? Because presumably you wouldn't want a fence this area here it would disrupt... would that be right?

Robert

I mean this is just a preliminary layout of the plant and in practice with such a space like that we would probably leave the vegetation intact. But it is only an approximation of the footprint. But basically the fence has to be from there through the coin and the storage tank up there. Basically the extend has to be from there to the coin and the storage tank

up there, basically what we see is we use the length of the treatment plant to get as far north as we can onward to Sawyers Valley tank. And then just a short pipe to link up with existing pipeline. Otherwise you have to come back here and then leak up here, and it is just a longer pipe.

Inaudible question is asked.

Robert

Yes. Yes. As I said the area that won't be affected by the plant, we will leave the trees alone.

Inaudible question is asked.

Colin

Sorry we can't hear the question.

Robert

We can put a fence on the yellow line as we indicated.

Colin

Yep, Diana.

Diana

Robert, can I just clarify then, you are saying raw water is coming in and treated water is going out. Does this mean that this water does not have to go back to be pumped up? So is this efferent, most efficient in the pipe work?

Robert

No. The raw water gets pumped through the site, gets treated, and it goes to store in the clear water tank up there. And then there is a pumping station, if you can see up there. There is a square building, there is a pumping station. They well on-pump it to the tank.

Colin

Be quick, Paul, yep.

Inaudible question is asked.

Robert

Yeah, the major source of power is from the transformer located below the weir.

Inaudible question is asked.

Robert

Some of the powerlines run along our pipeline routes.

Colin

One more on O'Connor.

Steve

I have a question on the drying beds. My earlier information was that there is about ten percent of the water that goes in through there, finishes up in the drying bed. Is that correct?

Robert

Yep.

Steve

That water won't all evaporate, so the original planning was for a pipeline from the drying beds to go back to the weir, you haven't shown that pipe on these plans.

Robert

Yeah it is not shown. What we hope to do is to use what we call... we actually use the site split and as it settles we use the decanting, the decant water. It is actually still good quality water. What we propose to do is to either dispose of it through the adjacent creek line and then ultimately find some way into the middle of the Helena catchment area. But we need to get approval for this charging the water into the natural system.

Colin

Quick one Karen.

Karen

I remembered something about, instead of supernate, which is the one that you are talking about, where the water could be put back into the treatment plant, so recycled.

Robert

We could look at it, but it is the subject of water treatment plant process. Now currently we have yet to decide how it is going to work in detail.

Colin

O.K. If we have a quick look at the final site... the pine plantation.

Robert

O.K. pine plantation is north of the existing air strip and what we propose to do is to locate the plant on the area covered by the pine. The pine actually covers about half of the site. And again what we propose to do is to try to pump the water up to this site. And slowly, it goes to the process, and it goes to the tank, and then the pump, and then it feeds back into the system. Also shown on the drawing here is the drainage sump. And we propose to also put a pumping station to transfer the run off from the entire site through the catchment downstream of the Weir. So the things that you need to consider is you need to run a pipeline from the weir to this site via Allen Road which it will go past some of the public area such as the Forrestfield Centre and the Kookaburra Outdoor Cinema. That could have some major impact because you are going to have three major pipes going in and out along Allen Road.

Inaudible question asked.

Robert

You are talking about power supply. Can you speak through the microphone?

Gerard

There is a power line running behind the pipe plantation which go to the geophysical site. Can you use that same power line and same clearing width?

Robert

Umm... I don't know Gerard. I have to look into that if this site is chosen we have to look seriously at the power supply option as well and the route to get there.

Inaudible question is asked.

Robert

Yes. But I think that the proposal to upgrade the power supply to the whole area from 66 kv to 132 kv.

Colin

Any other questions on this particular site? Just if we can just get the mike.

Lady

Would there be chemicals in the drainage from the site that you have to remove offsite?

Robert

I doubt whether there will be any dangerous chemical that will be.... Really it is more hydrological that you must, and it is also a policy not to... if this site is chosen, the Department of Water will not allow any drop of water to go back into the reservoir in Mundaring. It is O.K. to push it to the middle Helena catchment because it has got a long

way to travel to the low Helena pipe head dam and then at least it has got time there to get assimilated by an unnatural system. Any other questions or comments about this site?

Colin

Sharon and then Paul

Sharon

When I saw the flyover of the whole thing, is the DEC site also in the RPZ or is it just this one? Because it looked like they were both pretty close. And also the lower site one, looks like it's right on it but yet there doesn't seem to be any mention of that.

Robert

The pipe plantation is definitely in the reservoir protection zone. And the one for site one is definitely outside the RPZ. Site one is defiantly outside the reservoir protection zone. It is below the reservoir. In terms of reservoir are we talking about the reservoir border that is impounded by the Mundaring Weir, so the water that is stored there needs to be protected in terms of water quality.

Colin

Got one just here.

Paul

With that storage up there would you work that with your system so that when it fills you would actually put that back into the water treatment plant?

Robert

Yes

Paul

When you first planned it on top of tank hill, it was discussed that was what you were going to do, nothing was ever going to go down into the catchment area, so I can't see why you can't do that here.

Robert

Umm. Paul, if I can catch what you are trying to ask, are you saying that can the water in this sub be reused?

Paul

Yes.

Robert

Yes, I think if there is opportunity to reuse that and put it back into the treatment plant process we would. But I mentioned that the hydrology of the plant during a major storm would dominate what the plant will be able to treat.

Paul

You seemed to think it wasn't a problem up at tank hill.

Robert

Tank hill?

Paul

There wasn't problem there, then, now there is.

Robert

The tank hill, the sump is basically to ensure that if we do need to dispose of the water in the take we are allowing it to sit in the sun so that we can get the chlorine out before we can discharge.

Inaudible question is asked.

Robert

Well there is this reservoir that you need to protect. I am not sure if... well tank hill does ultimately flow into the reservoir base outside the reservoir protection zone.

Colin

I'm just aware of time, and we are running short of it, but I know one of the issues a number of people said they wanted to discuss was the issue of the presentation that the indigenous elders made. So I know that was an issue that some of you wanted to make some comments on. I am just aware of time, it is now 9:20 and I would just like to at least give some opportunity to consider that and any other issues that we need to discuss before we wind up. Yes. Steve can we get the.... Take this one through.

Gentleman

I just wanted to ask when the Noongah presentation was being made, do all the four sites, for elders in their particular point of view or just one or two of them? They didn't say what the area was that they were concerned with.

Colin

Yeah listen I don't know the answer to that, but Sharon did you want to comment on that issue. Steve can we get the mike?

Sharon

What the Noongah elder made clear was that they don't even know where the four sites are because they haven't been consulted. If you look at the archaeological report, there were scatters found on all four sites. The archaeological report is only part of what was promised this community forum. We were promised that the aboriginal people of the country would be fully and properly consulted on the four sites prior to selection. What happened was, I have done a bit of homework on this, and I have it on good authority that the Water Incorporation employed AIC which is an anthropological firm to prepare an ethnographic study on the four sites which would include full and proper consultation with aboriginal people.

This called for an ethnographic survey, would only have been done for Water Corp if they were attempting to fill their promise to this forum of providing the outcomes of these consultations before this board made a decision. This is the proof that they did agree to do this. I have had people try to back out of it, but they did agree to this. I have since discovered that the anthropologists from AIC was unable to provide an ethnographic report on the sites because the brief given to him by Water Corp was to consult with a list of nine aborigines provided by Water Corp. These nine people were considered as non elders who did not speak for this area. None of them were spokespersons who could speak for country. And because the brief given by Water Corp to AIC was cultural inappropriate meaning there could be no full and proper consultation, AIC declined to provide an ethnographic report to Water Corp.

Now this has been happening regularly with Water Corp who are not going through the proper processes. We will have someone of the indigenous tell us that they had an email from the Land and Sea Council stating otherwise. That was over two years ago. And the Land and Sea Council, if you read the letter tonight, recognises that under the native title findings and under cooperative cultural behaviour, aboriginal people must speak for country on country. It is culturally inappropriate for any other person to do that. This is not being advised. I do not feel Water Corp is not being advised. But the other thing that I find downright insulting is that Water Corp will consult within individuals representing different interests in life heritage. Which if you read the heritage quite properly they spoke to four people on white heritage. But they will not fully and properly consult aboriginal people to speak for their culture, laws, spirit and religion. And I want to know why white heritage is given the courtesy of full and proper consultation before the site selection, but black heritage is not

Once again they haven't provided what we have requested. So I hope that clarifies it. The archaeological study was cursory. It is not an ethnographic study. An archaeological study just says there are some scatters around, when it is cursory. It doesn't even include, which has me worried, I think probably the lower culling of site one. I can't speak for it but I'm pretty sure that's got ethnographic importance as well as a side of significance and at least if not a sacred site, but I am not sure. I can't say on any of these. But without the ethnographic and full and proper consultation we can't know. And once again just like floral surveys and the rest, we can't make a fully informed decision.

Colin

Vanessa did you want to comment? Vanessa is from the Water Corp's indigenous engagement unit.

Vanessa

I am a Noongah person from the southwest. I have been at the Water Corp for 16 months. I worked with an indigenous resource unit. With the letter that you are seeing tonight. I basically went to land title claimants including the people that were here to visit earlier. They were all invited from dating almost two years ago, to be engaged from the start with all this consultation that is going on. And then another thing was that on the 26 of April this year, I attended the Southwest Indigenous Land Council to speak to them about people, names of Noongah people to come and do an ethnographical survey. Now that has not yet been carried out. I was given a list of names. The people that we engaged... the consultants they absolutely refused to work with those people. So basically now what we are doing is going back to the Land Council to say well you give us a list of names to consult with, and give them a letter to say that these people are the ones to consult with. So what we have to do now is go back to the Land Council and say we need a list of people. From the start we have engaged the land bodies, the native title claimants. We have always encouraged them to come all to the meetings. And they have not attended. A few times I think..... sorry? Was there any other questions.

Inaudible questions asked.

Vanessa

The four sites in that location. The only closest aboriginal registered heritage site is the Helena River which is next to site one so it is a fair way away from where the works are going to be done.

Inaudible question asked.

Vanessa

Well that is not a registered heritage site, so....

Inaudible question asked.

Vanessa

Under the Heritage Act, for us to do work you need to have it registered through the DRA.

Inaudible question asked.

Vanessa

Well unfortunately if it's a matter of registered sites....

Inaudible question asked.

Vanessa

Unfortunately the people they asked us to consult with were 36 people. The Water Corp policy is you got to consult with 9 people. 36 people I don't know if.... everyone would agree with us to take 36 people out, matter it definitely doesn't?

Lady voice

Mr. Karunner and Mr. Karunner's daughter and Mr. Bropho were here tonight. They said that they would actually just like to have a tour like we had at the four sites. And show them the four sites and let them have an opinion on what they think about the four sites in order of preference, etc. like we have done. So if someone just gives them the coaching that we had at the four sites.

Vanessa

We actually went to the meeting but unfortunately they left the meeting before we had our presentation. Because we had our sites up as well to give a brief. But unfortunately they left the meeting.

Lady voice

I think it'll help if someone just now arranges for them to have a tour of those four main sites.

Vanessa

What we will do is conduct a survey so it is going to be... yeah we have to consult with people.

Lady voice

I think it's just that they felt that they were not directly asked to come on and we will show you. We got on the short list. And we value your opinion.

Colin

Any other comments people want to make on this issue? Yep quick one Miles up here.

Miles

Seems a bit odd to me. This has been a very open process. I have great difficulty with, we have difference of views, all kinds of things. If you have a view about your heritage in this area, come to the forum and express that view. That is what the process has been about. Seems a bit cultural inappropriate doesn't actually mean anything to me.

Vanessa

Well I am a Noongah person and I don't see how it would have been culturally appropriate if my community was having a meeting and it involved heritage, all the land.

Colin

Listen I think there are strong views about this issue and I don't think this is a good time or place to get into a debate about what those terms mean. If we can leave it there. Vanessa has come to try and respond to the questions that were raised. I mean clearly the corporation has said that it needs to do more work on this and Vanessa has outlined that. Clearly it is not to diminish the importance of the issues that have been raised.