Joe Williams - Interview Transcript

Interview by Donna Mlyneck, April 12 2021 on Zoom.

Donna:
First of all, a personal question: How did you get interested in desalination?

JW:
This goes back to when I was an undergraduate. I studied at the University of Manchester and in the second year I got the opportunity to spend a semester abroad in Melbourne in 2010. I took one module on water and became interested in water issues. At the same time I studied there, there was a drought in Australia. Australia decided to start investing in desalination. Then, I decided to write my undergraduate dissertation on desalination plants in Melbourne. And later on, I decided to study for a PhD to continue research on this issue.

Donna:
How to conduct political ecology analysis of desalination? What does a political ecology analysis of desalination offer?

JW:
My interest was always in political ecology. Desalination gives an interesting lens to study the broader issues around political ecologies and political economies and how capitalism works and the associated power relations. So, desalination gives a useful lens through which to understand the broader issues. Desalination is such a radical technology that it highlights socio-economic relations which are not necessary so clear in other aspects. It throws light to (unequal) relationships which remain otherwise hidden. Also, it illustrates and highlights issues we are interested in the field of political ecology.

Donna:
Do you think that desalination is a socio-technical “fix”?

JW:
Desalination is often in the technical and managerial water literature presented as a “solution”. You can often see it on the big company desalination websites: They use the concept of solution and mostly the following argumentation line: “You pay us the money - We built you the desalination plant and then your water problem is solved by us”. So, there is this perception in the socio-technical-managerial circle that desalination is a solution to various water problems.

However, we should understand desalination rather as a **“fix”**. Yes, it certainly produces more water, but also it raises wider issues and problems. **Desalination is a contradictory fix** - **Not a solution**!

There are different ways you can understand the term ‘**fix**’:

For instance, in a political sense: Desalination is a technology often used to **circumvent water politics**. A way of **diffusing water politics** without actually solving any problems which are in the heart of the matter.

In the **Spanish case**, it was a **way of reconciling the political tensions between North and the South**. It is circumventing water politics. But it does not solve any political issues in water at the heart of Spain. Desalination is used as a decentralised water source option, where particular regions want to reduce their reliance on other regions and other political fractions. So again, it is a way of circumventing those politics. To sum up, desalination can be a political fix.

Also, desalination can be understood as a **technical 'fix'**. The language of 'fix' helps to understand how desalination is something that does not address socio-political, economic and ecological issues, which are beneath the water sector. You can apply the technology but it is not that simple as that. Just simply adding desalination into a water governance situation that is characterised by inequality in access, unsustainability and political contestation in various interest groups, does not solve the problem. Indeed, desalination does not solve any of these problems. Rather, it continues a **water productivist managerial logic**.

There is also an **economic 'fix'**. Desalination is reducing the barriers of water scarcity to continue economic growth. In order to continue a growth based logic of water governance.

To sum up, there are different ways you can understand the term 'fix' - it is very multidimensional. Yes, **desalination ensures a reliable supply but it is not a 'solution'; and it is highly contradictory.** Indeed, inherently contradictory!

Donna:
What alternatives do you see to desalination to guarantee fair access especially in water scarce regions?

JW:
Some of my work has been done in California. I have interviewed many environmentalist groups and they have strong opinions about desalination. There I learned about alternative solutions such as conservation and reducing the use of water, being more efficient with water consumption, and waste water recycling. Actually, we have so many options and desalination is the most costly and energy-intensive proposition. Personally, I am critical of desalination but I am not completely against it. It is important to analyse the factors which are involved in the desalination plants. How is desalination imposed and how is it linked to inequality, unsustainable practices and financialization?

Donna:
In your opinion, who are the hegemonic and dominant actors with regards to desalination?

JW:
It is interesting to see how the decision to use desalination technologies have marginalised certain groups and empowered others. It is difficult to trace these power relationships. Desalination is not done on its own. It is **part of a shift in policy and part of a range of strategies**. Desalination plants are often controlled by water authorities and water companies. However, it is difficult to trace direct impacts of desalination. It is inevitable that it drives up the price of water as it is a very expensive technology. Also, the contracts of desalination often result in that water does not go to the city itself but to large economic actors, such as the hotel industry at the coast or port authorities. So we can focus on the big

economic actors. Furthermore, the high price of desalination has significant social justice implications and marginalises certain actors. Also, there has been interesting work done on desalination and financialisation.

Donna:
The desalination plant in Barcelona is currently highly under-utilized**.** How can you explain this? Have you seen this also with other desalination plants?

JW:
This is quite a common thing with large desalination plants. There is a real danger with these desalination plants. There is - what I call - a ‘demand-risk’. Desalination seems very attractive especially in regions with droughts as a reliable, rainfall-independent source, but because it is so expensive - when the plant is actually built - it does not make economic sense to run it because the water is so expensive compared to other water sources: Desalination is a ‘demand-risk’. That is this idea that the demand is not high enough to produce water at this price. So, in lots of cases desalination plants operate at minimum capacity. Another example where we can see this is Australia. Also, a lot of large desalination plants are built in public-private partnerships. A private developer or private company owns the plant, operates it and sells the water to the municipality. Moreover, there are clauses in the contract: A minimum amount of water to buy. A lot of these public-private partnerships have this clause that they need to buy a certain amount of water.