The Minister’s Question: An Individual Perspective.  

By James Darling  

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A Fact:

The best environmental managers are plants.

The Decision:

The decision is about how to apportion operational and maintenance costs relating to the South East (SE) drainage network.

The decision must be one of principle: equitable, accountable and just.

The decision must have historical validity, give due weight to public and private benefit (and detriment), and be recognized as fair and enforceable in the context of the whole of SA.

Taking into account the economic and political realities, the decision needs to be simple, clear and defensible.

Background:

The question was set by the Hon Ian Hunter, Minister for Environment Water & Natural Resources, which was directed to Tim Collins, Manager, Natural Resources South East, DEWNR, to relay it to the SE NRM Board with the instruction that the SE NRM Board employ and pay for the research foundation, New Democracy, to instigate a “citizens jury” process to address the Minister’s question.

The Question:

“How should we pay for maintaining our largest infrastructure asset – the South East Drainage Network?”

The question is shifty and presumptive.

Shifty because of the “we”: who is the “we”?

And presumptive because the “we” slides into the “our”, and presumes that ownership of the South East Drainage Network is confined to the South East - a dangerous and back-dated precedent for infrastructure in any part of the state.

The SA government owns all the relevant drains, easements and associated infrastructure in the SE. Government ownership includes the water in the drains.

Does the SE drainage network carry larger $ value than the hospitals, than the road systems, than all other government- owned infrastructure in the South East? The answer must be no. It is another misleading aspect to the question.
The question might be better addressed if it were not so conspicuously loaded and skewed towards a preconceived outcome.

“How should the SA government allocate operational and maintenance funding for the South East Drainage Network?”

Information Kit (IK) – South East Drainage Network/Community Panel. (Ref 1)

The DEWNR Information Kit is government document that is informative, but in many regards is unashamedly self-serving and selective. It highlights and omits as it suits.

The IK reads as if no aspect of the USE Project administration polemic was ever challenged.

IK Hydrological Evolution:

It lacks any description of the differing evolutionary ages of the South East especially between the Naracoorte ranges (1.1m years) and the coast, (Younghusband Peninsular 7,500 years), or how and when the Upper South East was formed from the Southern Ocean, how young it is by comparison with the Australian continent (most of which is 450m to 2 billion years old), the marine origins of much of SE salt, and how, in common with many areas of Australia, the single most formative element was the freshwater lens that moved in a north westerly direction over its heavier, supporting saline waterbed.

IK Drainage Payment History:

It understates, in its historical description, the overriding reason of transport and communications for draining water to the sea from the LSE from the 1860’s to after 1900.

Apart from the growing population of Mt Gambier needing to maintain contact with Adelaide, a spin-off of government-built, labour intensive drains, and the sale of Crown Land to swell the coffers of Treasury. This became a significant incentive for government to dig LSE drains.

The assertion that LSE drains constructed between 1911 and 1935, and the “Petition Drains” (1905 - 1950) were half paid, or fully paid, by landowners is not supported by “Down the Drain – The Story of Events and Personalities Associated with 125 Years of Drainage in the South-East of South Australia”, (Malcolm Turner & Derek Carter, SE Drainage Board, 1989, Pp 46-7 Ref 2). The government paid for most of the costs of these drains.

Indeed, “Down the Drain” highlights how attempts by government to levy landholders for drains were invariably contentious and divisive, resulting in all attempts to levy landholders being abolished in the 1970’s.

The Environment:

In the LSE Drains had been dug for more than 100 years to aid transportation and to open up inundated land for agriculture.
When considering drainage, preservation and the assertion of environmental values were not even considered before 1970.

Indeed, it is difficult to argue that the protection of environmental values, has come anywhere other than a very poor last in the entire history of drainage in the South East region.

The consequences of SE drainage for the vast majority of LSE & USE wetlands have been negative.

High value conservation areas, wetlands in particular, need to be enhanced, not destroyed, by government projects. The preservation and enhancement of high conservation areas is a public benefit. It is obvious that the government has been so compromised in its support for excessive drainage that it has failed in its public duty of environmental conservation and should be required to address its deficiencies.

The Coorong:

The IK scarcely mentions the Coorong.

Yet benefitting the Coorong was in place during the 1990’s in the first $24m USE Project.

It became a specific goal in the next $48m phase of the USE Project.

It became central in the Reflows part of the project.

The Coorong is the main beneficiary of the proposed, soon to begin, massively engineered $60m SE Flows Restoration Project (SEFRP).

Then, why this coyness, this downplaying, regarding the role of the Coorong in the IK, you might ask?

The answer is simple: because the health of the Coorong is not the responsibility of the ratepayers or landholders of the South East.

The Coorong was declared RAMSAR Wetlands of International Importance in 1973. The Coorong is the responsibility of government, principally the Federal government, but also the State government.

The objective of enhancing the environmental health of the Coorong in the proposed $60m SE Flows Restoration Project, $54m from Federal and $6m from the SA government, underscores public benefit and makes clear the role of government. It is obvious that the Federal government has a lead role to play in the operation and maintenance of SERFP.

Environmental Monitoring:

The IK asserts that the SE Water Conservation & Drainage Board has in place a Decision Support System (DSS) “...which is used to inform management option scenarios, flow planning, operational decision-making and post event evaluation (Willis 2011)”, P47.

It outlines 7 dot points relevant to DSS environmental monitoring, asserts DSS maintains a “regulator status register” to record observations, plan and review functions, and “to provide alerts to network control managers”.

The implication is that the DSS has been fully functional for at least 3 years. This is deceptive.
Talking to SEWCDB committee members, it is obvious that DSS is still being developed, is “in its infancy”, that there is no separate provision for hydrological monitoring in the SEWCDB’s current budget, that the majority of monitoring stations are not being operated or maintained, and that in certain areas automatic monitoring equipment has being pulled out because it can’t be kept working.

None of this is made clear, or expressed, in the IK.

Once again, the public benefit of environmental management, in a landscape that has been mechanically altered by the scale and depth of both the LSE and the USE drainage network, does not receive the priority that is necessary. This deficiency exacerbates the impacts of a de-watered landscape to the detriment of high conservation value wetlands throughout the region.

**Beneficiary Pays Principle:**

The IK claims that using the BCA Net Present Value, (Table 22, P63 – how $ values established?) is “…consistent with Wheeler (2002) which assessed private benefits from the construction of the drainage scheme in the order of 88%”. P64.

This is a significant ambit claim that requires comprehensive back-up evidence. In order to find out about that, you have to find “Wheeler, 2002”.

Nowhere in the IK’s “Further Reading/References” (PP 71-2) is Wheeler (2002) mentioned.

But as the alphabetical References jump from “Kawalec R” (P 71) to “South Australia DWLBC Conservation” that (P72), I can only presume that all References from K to S have been erroneously omitted, including “Review of Cost-Benefit Analyses, Cost Sharing Frameworks and Valuation of Landholder Environmental Activity for the USEDSFMP “ by Wheeler, Young & Bright, Rural Solutions SA for DWLBC, October 2002.

The Review points out from the start “…that if there were no environment values associated with the drainage project, the scheme would probably not be economic. The total net benefits from improved agricultural productivity do not outweigh the costs of the scheme”. (P ii - Executive Summary).

The Review dismissed the Polluter Pays Principle as “…very hard to implement, and is not supported on some equity or efficiency grounds…” noting that identification, regulation and enforcement are difficult and costly. (P ii – Executive Summary)

Beneficiary pays is the only option explored.

The ambit claim of 88% is subject to modification when landholder contributions (changes to drains, perennial pastures, farm plans, revegetation & wetlands management), are taken into account. “Landholder contributions to the whole USEDSFMP now range from 44% – 65% under a maximum and minimum landholder contribution scenario.” (P iv – Executive Summary).

The Review quantifies the “benefits transfer” to the wider community as:

1) $8.3m for increases in healthy wetlands
2) $18.9m for the planting of 41,00ha of native vegetation
3) $5.45m for protecting agricultural production

These figures bear no resemblance to the reality on the ground. The Review was written in 2002 before the major changes to the USE Project took place. It is a document full of unusually acute common sense and critical understanding. But it is fundamentally flawed as an evidence-based document because it was published in Oct 2002 when its contents were aspirational and not fact.

A lot has changed.

**Upper South Dryland Salinity & Flood Management Plan, (USE Project):**

The USE Project was a $24m co-ordinated initiative by USE landholders of which I was one. The Project Manager was based in Keith in 1993 or 94. The SA and Federal governments contributed $9m each, while landowners were levied $6m, to fund the project.

There were 4 integrated component parts to the USE Project:

- Drainage.
- Wetlands Waterlink
- Saltland Agriculture

In the Northern Catchment the drainage component was understood to be surface water only drainage, more correctly described as water management, with drains accentuating natural flow paths and no more than one meter deep unless specifically required by topography.

These 4 components were undermined by threats of legal action regarding the Central Catchment’s Trial Fairview drain and the digging of extensive deep drains in the Central Catchment and a massive excavation though Heritage Agreement, by the largest landowner in the USE region, while a drain digging moratorium was respected by almost every other landowner in the USE.

The USE Project had been high jacked.

This set the stage for a complete change.

After a visit by the Minister, Hon John Hill, to the massive Northern Catchment Outlet, (viz Hansard for one of the most unforgettable descriptions of political decision-making), the USEDSFM Act 2002 was written in record time and passed in with zealous haste.

Bad legislation targets everyone, not just the subject, the pre-eminent reason, but everyone.

The USE Program Board was put in place by the USEDSFM Act 2002 to administer a further $49.3m project, funded by $11m by landowners and the remainder spit 50/50 by Federal and SA governments, $19.15m each.
Deep drainage into the saline waterbed, well beyond the 2.0m drains envisaged by the Commonwealth government, became the norm. Opponents of deep drainage in the USE Project administration found they no longer had a job. The goalposts had shifted. Revegetation was a thing of the past. When you drained down to the saline waterbed, saltland agriculture was no longer relevant. Mostly, it was all about growing Lucerne.

The environment was a necessary ingredient but, in the final analysis, was a far lesser priority than groundwater drainage. The USE Project was understood to be first and foremost about digging deep drains to increase agricultural production.

In October 2007 I forwarded a detailed Submission to the Natural Resources Committee (NRC) of the SA Parliament raising fundamental concerns about the USE Project.

I presented in person to the NRC and included a dot-point Submission, (3:3:08) Ref 5.

Some of the points were:
- The USE Project drains are causing severe and irreversible damage to wetlands and native vegetation.
- Project benefits are demonstrably inequitable. Detrimental impacts to landholders are enforced without compensation.
- There is no provision for maintenance.
- Key provisions of federal funding of the USE Project have been manipulated, undermined and reinvented. Project titles, aims and personnel change like shadows.
- The deep drain compulsion has relegated the wetlands waterlink, native vegetation conservation, saltland agriculture and perennial revegetation components of the USE Project to insignificance.
- I concluded my Submission with the “Recommendation: that the Government immediately institute a balanced and through, independent, whole of landscape environmental and economic audit of the USE Project…”

The USE Program Board carried on and continued to administer what was becoming and a more and more complex USE Project.

By 2010, the public principles of the USE Drainage Management Strategy had become:

1) Supporting sustainable agricultural business and the regional economy
2) Protecting and enhancing the region’s biodiversity assets
3) Sustainable surface and groundwater management
4) Effective and efficient governance

With the aims of:

1) protecting agricultural lands from dryland salinity
2) mitigating widespread and prolonged flooding
3) providing environmental flows to enhance wetland and watercourse ecological values
4) protecting and enhancing the ecological values of remnant natural areas (terrestrial and wetland) through management agreements with private landholders. (USE Drainage Network Management Strategy, 2010 Ref 6).

If you understand the implications of the above – and they need to be decoded and deciphered – it is apparent that the goalposts have shifted considerably since the USEDSFM Act 2002 Act was passed into law.

**Mechanisms for Regional Revenue Raising:**

The IK puts forward some options based on the NRM Act 2004. The SENRM Board already raises funds from:

1) a water based levy
2) a land based levy

And the IK proposition seems to imply that either of these options could be used by the government via the SENRM Board to collect regional funds for the operation and maintenance of the drainage network.

If the SA government decreed that the SENRM Board collects its levies, then do not expect that the SENRM Board will be considered a reputable organization by the SE region.

Neither is it up to the Councils of the region to be the conduit for what will be inevitably divisive and contentious.

What is obvious is that the State government have to bear a far greater cost than $2.2m per year, and that the Federal government has a to take a share, in particular on account of the Coorong, and that these financial commitments need to be in place before a levy contribution can be properly considered.

Who would put their hand up as a polluter?

Who would put their hand up as a beneficiary?

Each question opens a Pandora’s Box: the more you go into it the worse it gets.

In the Northern Catchment there are surface water only, USE Project drains that have had scarcely had water in them since they were dug. There are deep drains in the Central and Southern Catchments that have run all-year, every-year, since their excavation - even in the drought of 2006/7. (The Tilly Swamp Drain being drinkable water in Easter 2007: tasted JAD just before TS water meets NC water: one clear, one foul).

Equity has always been an USE Project problem.

**A Personal Perspective:**
I have always believed that the best, most efficient environmental managers are plants.

I am a believer in the as-yet unheralded discipline of strategic landscape design.

Landscape design, maximising the role of plants and minimizing engineering interventions, got lost from the radar, while the “instant fix” of deep drainage filled the screen.

Lesley Forwood and I were successful in reducing 2 proposed deep drains, one through Duck Island and one on the Naberoo boundary to one shallow drain. Our preference was no Project drains at all. Just enhancing flow paths at less than 0.5m.

Lesley and I have paid Zone A levies as our share of the $6.0m landholder contribution in the original USE Project.

For the second stage of the landholder $11m contribution, our total levy payments were $117,034.85.

We have had no flooding since 1993.

Water has been in the drain only a few weeks in all the years since it was dug. Not a single flood. Water in the drain, enough to make it run.

Duck Island’s traditionally high watertable has dropped a meter and more, and is the lowest in 30 years. Mallee gums now grow in t-tree swamps.

The single, most worrying thing that is occurring is the de-watering of the landscape throughout the region. The deep drains closer to the coast are not the only contributor to that de-watering, but they are, in my view, a prime contributor.

Why would Lesley and I pay more levies to maintain a system that puts at risk, almost inevitably dooms, the ephemeral watercourse conservation areas of Duck Island and its encircling neighbour, Gum Lagoon Conservation Park?

Much of the SE landscape is already so parched that recharge and replenishment would take an unimaginable volume of rainfall before being able to flood.

**Drainage Maintenance:**

It is difficult to find USE Project documents regarding repairs and maintenance because it was just wasn’t addressed. That would happen later.

I table a document by Rob Kemp, Senior Project Officer, USE Project, Nov 2001 – March 2006, about Drainage Maintenance and costings, which was presented to the Technical Reference Group meeting in Keith (early 2002) and to the Program Management Group in May 2003. (Ref 7)
It is worth reading because there is a lot of useful information about the range of tasks involved in Drainage Maintenance and much of that still remains relevant. And it has rates and costings. The weakness, of course, is that it was put together in 2002.

Costings:

The crucial first point to make is that the SA government handed the SEWCDB control of the whole USE Project in 2003 – a 38% increase in the SE Drainage Network, adding 714kms of drains, as well as major floodways, and numerous structures. There was additional SA government funding of $3.2m in 11/12 and $3.1m in 12/13 which has been withdrawn.

The funding base servicing the LSE Drainage Network had effectively been slashed by the stroke of an Adelaide pen. And, what’s more, the same pen wants to extract levy payments on LSE government drains to make up the shortfall. It is provocative.

In the section, Drainage Assets Management Costs & Funding (p 63-4), the IK stakes out the government ambit claim for funding.

How are these values calculated and by whom?

If Table 22 is the Net Present Value in 2008, what is the Net Present Value in 2015?

The replacement $ values of the SE Drainage Network’s “Asset Base” (P 62) are key figures:

- Drain channel assets $115.43m
- Structures of drainage networks $172.07m
  Total $287.5m

The government proposed operations & maintenance costs is 3%, an “accepted industry standard”. It was seem to me that 3% is a civil engineering standard and that drains, correctly designed, aligned and dug, are stable structures and that 3% might be high.

If 3% $8.625m/year  
2.5% $7.187m/year.

In an ideal world, if the SA government reinstated the $3.15m it withdrew after 12/13, the Federal government paid for the costs associated with public benefit conservation and the Coorong at $0.75m/year, then the shortfall could be somewhere near $1.0m and achievable.
Realistically, my calculations would put the smallest ambit claim by the SA government to cover the shortfall to be in the range of $3.3m to $3.9m/year. They would have that shortfall earmarked to be raised by levies.

**Political Reality:**

A levy payment won’t get through the Upper House without finding support which at present it doesn’t have.

The South East Drainage System Operation Management (SEDSOM) Bill was put to Parliament in Oct 2012 and lapsed. That was more than 2 years ago.

The support is still not there – which is why we are here.

If the government could have got the SEDSOM Bill through, they would have got out their levy notices at the earliest opportunity.

Do the people of the SE make complaints about big ticket items in Adelaide, the new hospital, Adelaide Oval, projects which dwarf USE drainage? In the main regional Australians see and accept the public benefit of our taxes at work outside their region, in state capitals most obviously.

But public benefit is a two-way street.

Public benefit and accountability go hand in hand.

**Conclusion:**

A plan for the next 2 years:

The first task is to get the system working properly which is surely the responsibility of government.

**Step One:** the SA government must commit sufficient funding to the SEWCDB to oversee the operation and maintenance of the enlarged – and enlarging - SE Drainage Network. The SA government should commit to servicing the LSE drains and to reinstating the funding it withdrew from the SEWCDB after 12/13. This commitment should be for 2 years and cover 15/16 and 16/17.

**Step Two:** ongoing $ support should be secured from the Federal government for the public benefit of enhancing the environmental values of the Coorong.

**Step Three:** that the SA government should immediately institute and fund an independent, whole of landscape, environmental and economic audit of the USE Project by nationally recognised experts.

The long-overdue audit would, amongst others tasks, identify the costs and the benefits – and detriments – and would be tasked with providing an informed base for the equity of a possible regional contribution.
It would have a limited life and specific objectives.

AS I said in my letter to LSE papers in Sept 2012:

“Dewatering a landscape is a hazardous intervention. There are many impacts, some foreseen, and some not foreseen… Beware levies, especially when the government expects to drive payment from those who get no benefit from the Project.” A Project which was “divisive and inequitable, arrogantly imposed, too deep and too expensive…” (Ref 8).

Jury Decision:

I consider that there is a long way to travel before being able to reach a decision about any form of levy payment that is equitable, accountable and just. This forum is close to the beginning of the discussion and could, I predict, be a long way from its end.

The historical validity of government built and owned drains in the LSE must be acknowledged and continue to be funded.

A priority should be the proper funding of the environmental obligations of the SEWCDB, including the reinstatement of wetlands, (with the successes of Nature Glenelg Trust as examples), and the provision of a fully funded DSS monitoring scheme as planned.

The USE Project’s public benefits should be acknowledged and be seen as benefits to the state and to the nation.

There is no doubt that economic forces will put considerable pressure on an outcome. The political reality is that levies need either the authority of an existing act or the support of the Upper House. Whichever way it might happen, the enforcer /collector will be put in a more than invidious position.

A simple, clear way to deal with the issue is for the SA government to take a 2 year view and undertake the 3 steps I have outlined in the section, Conclusion.
References:

1. Information Kit, DEWNR, SA Govt., Jan 2015.


Contact details:

James Darling
Duck Island
Box 335 Keith SA 5267
Tel 08 87574067
Fax 0887574072
Email dipdig@activ8.net.au
www.duckisland.info