Getting real about shoreline recession: time to plan ahead and develop a scheme to relocate threatened coastal settlements

This paper is an attempt to re-start a discussion about the apparently intractable problem of what to do about existing coastal settlements which are in danger of being lost to the sea.

It takes as its starting point that climate change is occurring¹ and has a number of adverse consequences for coastal settlements. Unfortunately, the current NSW Government seems not to accept this premise and so has not contextualised shoreline recession as part of the suite of coastal management issues exacerbated by climate change.

The problem of shoreline recession will continue and increase

There are many 'hotspots' along the NSW coast, typically low-elevation sites with erodible substrates, actively affected by coastal erosion and shoreline recession, which threaten existing settlements, particularly residential buildings. It is highly likely, under climate change conditions, as storminess increases and sea levels rise, that both the rate of shoreline recession, and the incidence of such 'hotspots', will increase.

While one thrust of NSW coastal policy has sought to prevent new development in locations likely to be affected by these coastal hazards,⁵ this is not enough. The threats to existing settlements, must also be addressed.

There are three major policy responses to these threats mentioned in the existing literature:⁶ a) defend, b) adapt and c) retreat. However, there has been little discussion in NSW about the suitability of these responses, no realistic evaluations of their practical effectiveness under future conditions or assessments of their implications for the economic, social or environmental values of the NSW coast.

In the initial part of this paper I intend to provide an overview of these options and their practical utility, before outlining a policy which may provide an affordable solution.

Engineering offers limited protection, in limited locations for a limited time

First, 'defend'. While the construction of 'permanent' coastal engineering works⁷ may be economically feasible in the short term in some locations, the allocation of public funds for coastal defences cannot be approved in all locations due to the very substantial costs of construction and ongoing maintenance and the limited value of the assets at risk. However, the conclusion that such works are not feasible may be inescapable in many other locations if the adverse impacts likely to be caused by such works,⁸ are taken into account.

Regrettably, the amendments made to the *Coastal Protection Act 1979* (NSW) in 2010 and 2012 - allowing private landowners to construct *ad hoc* unapproved 'temporary' coastal engineering works - does not consider these factors because environmental impact assessments of such works are not required.⁹

This approach is fraught with difficulties¹⁰ and has the potential to produce a suite of adverse economic, social and ecological impacts.¹¹ Further, it exposes landowners who construct 'temporary' works to legal actions for nuisance by adjoining landowners whose lands are consequently affected by increased erosion.¹²

Such works may also encourage a false sense of security and lead to further, more intensive development in hazard prone locations, on the basis of an erroneous assumption that the coastal engineering works make the location 'safe'.¹³

Though it may be technically possible to construct coastal engineering works to withstand the frequency and intensity of historical storms, such works may prove inadequate or ineffective as sea levels rise, and the frequency, intensity and duration of severe storms and extreme events increase, perhaps by an order of magnitude.¹⁴

Further while upgrading sea defences may be possible, this would be expensive and required repeatedly, since sea levels are forecast to continue to rise for centuries, ¹⁵ creating impacts likely to persist for millennia. ¹⁶ If a series of severe storms, cause a partial or catastrophic failure of these structures, the result is likely to be more damage and loss than would have been the case had the works not been constructed and further development not proceeded. ¹⁷

In the long term however, it is likely that in many locations where works have been built, the continued maintenance of such works may no longer be technically feasible, economically justifiable, ecologically sustainable or socially acceptable. This has been the experience in the UK¹⁸ and the USA¹⁹ where there is debate about who should bear the costs of shoreline recession and coastal defensive structures, and why.

Serious political risks may arise from attempts to 'defend'

Attempts by private landowners affected by shoreline recession to compel the State Government to fund the construction of coastal engineering works may generate serious political risks if affected landowners campaign to unseat local Government MPs who are reluctant, or outright unwilling, to commit significant public resources to fund the construction and continued maintenance of such sea defences.

Other political risks may be created if a numerically superior group of non-coastal resident voters perceive that their rights to public access and enjoyment of the coast are threatened by extensive coastal engineering works.²⁰ These non-coastal voters may also oppose the diversion of public funds into coastal engineering works and away from other programs considered to be higher priorities, prompting other 'campaigns'.

Building adaptations and on-site retreat are only short-term options

Second, adapt. In theory, adaptations such as raising floor levels may extend the life of buildings facing higher sea levels and increased frequency of flooding, but in practice such modifications are often limited by the type of existing building.²¹ In reality, adaptation can offer only short term relief from coastal hazards, since the foundations of most affected buildings will be undermined and eventually compromised by approaching erosion.²²

Though the relocation of existing buildings behind appropriate setback lines may be a viable response to shoreline recession in some locations - if the allotments have sufficient depth to accommodate the re-siting of the dwelling on the affected sites²³ - this option too will be appropriate for only a limited time as shoreline recession continues into the future.

Sooner or (perhaps not very much) later however, the recession of the shoreline and the destabilisation of adjacent land will render many coastal allotments unsafe for continued residential occupation. Under these circumstances, as the hazard of shoreline recession approaches, development consent for the use of the allotment will cease.²⁴

Other responses will be required

In those locations where coastal engineering works are not technically feasible, economic justifiable, socially acceptable or appropriate due to adverse environmental impacts and where adaptation measures have been exhausted, other responses to shoreline recession will be required.

Landowners' preference? Compensation at full market value

One response might be for the NSW Government to accede to landowners' demands for the compulsory acquisition of all buildings and land titles adversely affected by shoreline recession by paying 'just terms' compensation at full market value.²⁵

Though superficially attractive, particularly to the affected landowners, the acquisition of these lands by the NSW Government would be a colossal undertaking, involving tens of thousands of properties and a staggering commitment of public funds.²⁶

If adopted, this response also has the potential to produce a serious political backlash from electors unaffected by shoreline recession, who oppose the diversion of vast sums of public funds away from other essential programs or vital public services.

Treasury's preference? Rational economic approach: no compensation

Another response could be for the NSW Government to decline to invest public funds in defending private lands by constructing major coastal engineering works, and to refuse to acquire these lands, offering no compensation for their inevitable loss to the sea.

Such a response would be entirely consistent with existing NSW statute law which does not impose a Crown 'duty' to protect against the sea,²⁷ and only requires 'just terms' compensation to be provided where a State government agency takes an action authorised by legislation²⁸ and provides a formal notice of an intention to acquire land.²⁹

However attractive such a 'low-cost' do-nothing approach might appear to economic rationalists, this approach would also create unacceptable political and environmental risks.

Significant political risks are possible

The political risks of being seen to 'do nothing' could include anger and disaffection, court challenges and political campaigns, which lead to the loss of coastal electorates by Government MPs who are perceived to have abandoned their constituents.

While court challenges by landowners enraged by a non-interventionist approach by the State or local government would be unlikely to be successful, in my opinion,³⁰ they will inevitably be expensive and distracting³¹ and may paralyse effective political decision-making.

However a hostile, polarised electorate, and the discomfiture of parliamentary members unable or unwilling to commit to an open ended scheme of public funding for private benefit, would not alleviate the onset of the hazard of shoreline recession.

An environmental catastrophe in the making?

The environmental risks of not intervening are even more serious. Assuming they cannot construct defensive works, and State and local governments refuse to do so, some landowners may be forced to abandon their buildings.

Apart from their ruins creating hazards to navigation in the state's coastal waters,³² and to public safety on beaches,³³ it is possible that the demolition of buildings by winds and waves would create very serious water and air pollution, with significant impacts on public and environmental health.

Under storm conditions, materials which were stable and benign when on land, could constitute serious airborne hazards to people and public infrastructure.³⁴ Other substances³⁵ could pollute coastal and estuarine waters, affecting their suitability for primary contact³⁶ and the health or presence of economically³⁷ or ecologically³⁸ important species.

If old-style coastal dwellings were abandoned by their owners,³⁹ asbestos-bearing fibro,⁴⁰ could be broken up and pulverised by wave action. The fibres mobilised by constant fracturing and abrasion, dispersed by tides and on-shore winds, would constitute an extensive, persistent and serious long term hazard to coastal populations.⁴¹

Despite current NSW environmental protection laws⁴² many landowners may be unable to remove potential pollutants from their land and former dwelling before it is destroyed by wind and waves, due to the safety risks involved, the costs of the decontamination or the losses suffered in losing their principal asset, their home.

As a consequence, the demolition of structures and decontamination of coastal lands by landowners to prevent pollution and remove hazards to public safety and environmental health could be patchy at best and at worst, non-existent, resulting in many parts of the NSW coast being rendered hazardous for decades or generations.

Time to plan the orderly relocation of threatened coastal settlements

So, to retreat. A preferable response would be for the NSW Government to recognise shoreline recession as a natural geomorphological process – exacerbated by the climate change conditions of greater storminess and higher sea levels - which cannot be prevented or ultimately 'tamed' by engineering⁴³ and begin a program of facilitating the relocation of existing development away from areas of current and future risk.

The NSW Government could then assist affected landowners by creating a 'middle way' between the ongoing and unlimited public expenditure on coastal engineering works, (and burgeoning maintenance costs),⁴⁴ or massive public payouts based on 'just terms' compensation at full market value, and the 'do nothing' response which abandons coastal landowners to the formidable forces of wind and sea.

New estates and settlements will be required

Such a 'middle way' could assist coastal landowners by inviting the exchange of their eroding land titles for grants of land title in new estates established by the Crown⁴⁵ safely above the reach of coastal hazards.

Such a program of land exchange would require substantial action by the State Government to identify suitable Crown lands, guide the approval of the new estates and the development of necessary infrastructure⁴⁶ and to register⁴⁷ and exchange⁴⁸ the necessary parcels of land.

These new estates for the relocation of existing landowners would be in addition to new settlements to accommodate future demand by anticipated future population growth.⁴⁹

Identifying suitable areas for 'replacement' estates and to cater for anticipated 'future demand' would require careful consideration of appropriate locations, to optimise existing and planned future infrastructure, to preserve agricultural production land, to prevent adverse impacts on environmentally sensitive land including threatened species' habitats, and to avoid other hazards such as riverine flooding, mass movement, contaminated lands and conflicts with incompatible adjoining land-uses.⁵⁰

If the allotment yield required⁵¹ cannot be obtained from existing Crown land, and privately owned lands are more conveniently located or possess fewer constraints, the State Government should acquire these locations⁵² and proceed with the development of the new estates 'at cost', rather than leave their development to private enterprise, who may not be committed to achieving key economic, social and environmental outcomes.

A major program of government-led residential development would offer opportunities to embed, as foundational principles, ecologically sustainable estate layout, housing design, building materials and construction practices, improve the mix of housing types and incorporate current best practice in locating social and economic infrastructure, and designating adequate 'employment lands'.

The attractiveness of a land exchange program would grow over time

Critics of such a program might assert that no-one would swap a million dollar coastal property for an inland allotment worth a fraction of that value. However, after a series of major storms the appeal of a land swap may increase. A more astute analysis could conclude that, even if that analysis were true today,⁵³ the value of coastal land affected by hazards is already falling and will continue to fall as hazard impacts increase, insurance becomes prohibitively expensive or unattainable and the utility of owning such property diminishes.

Ultimately, if no other options were feasible and land exchange was the only way forward, the attractiveness of swapping a doomed, uninsurable, hazard-prone site with a substantial legal liability, for an allotment in a new, best-practice Crown sub-division, free of demolition and clean-up costs and legal liabilities, would grow, eventually becoming irresistible.

Gain of land in exchange for loss of land

Under such a program, public assistance to affected landowners could justified as an exchange 'in kind', in keeping with the long-standing common law rule: a gain of (an allotment of former Crown) land to compensate for the (eventual) loss of land to the Crown.

Because such a program would be voluntary, initiated by the landowner, and include an exchange of land titles, the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW) would not need to be triggered, and the State Government would avoid the crippling liability of the 'just terms' compensation at full market value.⁵⁴

The Crown would acquire demolition and clean-up costs as well as land title

Participation in the program and an exchange of land title with the Crown, would mean liability for demolition and decontamination would transfer to the Crown, as the new owner. This would be desirable since the Crown would be better placed to mount and run timely, consistent and accountable demolition and clean-up programs, minimising or extinguishing the potential for a legacy of disastrous environmental and public health impacts.

Incentive payments could encourage entry into the program

Such a program could be assisted by offering landowners incentive payments to participate,⁵⁵ not linked to (falling) market values.⁵⁶ Capped incentive payments would allow the costs of the program to be calculated by Treasury, in contrast to an ongoing, open-ended and practically unlimited liability for compensation at full market-value.

Incentive payments could also assist landowners to meet the costs of moving their dwelling to the new allotment (if feasible) or building a new better, more space- and energy-efficient dwelling.

If incentives were paid at their highest levels for the earliest possible entry into the program, ⁵⁷ when the land title is first identified as being affected by coastal hazards, the State government would gain substantial benefits. It would obtain the largest area of the (shrinking) land title, have the greatest flexibility in permitting appropriate revenue-generating interim land uses, such as short term rental, a longer lead time to assess, organise and conduct demolition and clean-up, and could maximise public benefits from dedicating the land for conservation and /or public recreational use, until the shoreline recession hazard made it unsafe for these uses to continue. ⁵⁸

With substantially lower incentive payments for late entry into the program,⁵⁹ when the area surrendered is minimal, the potential public benefits from interim uses are negligible and flexibility in assessing and organising demolition and clean-up are minimised, landowners would be encouraged to participate sooner rather than later.

Any landowner who chose not to participate would be free to do so but would receive no assistance, because ultimately they would have little or no land title to exchange and would bear the costs of the demolition and clean-up themselves and/or face the strict legal liability for any pollution which emanated from their land, before it was wholly lost to the sea.⁶⁰

Political risks would be minimised

Under such a program, political risks would be greatly reduced. Landowners affected by coastal hazards would have no basis for feeling abandoned, and while they would not receive full-market value they would be compensated 'in kind' and receive a substantial payment to assist their relocation. The cost to the public purse would not be zero but would be significantly less than the cost of 'just terms' compensation.

Further, concerns about scarce public funds being diverted away from essential programs would be minimised. In return for the limited expenditure of public funds, threats to public safety and to long term public and environmental health would be averted and non- coastal residents would retain, and perhaps improve, their access to the foreshore and its important coastal resources.

Back-lash would be also minimised because coastal species of economic and ecological significance would avoid 'coastal squeeze' by being able to retreat landwards as the shoreline recedes, allowing the persistence of coastal bio-diversity over time.

A range of additional benefits would flow from such a program

A range of other economic and social benefits would also be generated by implementing such a program. Coastal tourism, recreational and commercial fishing industries would not face a decline and eventual collapse. New and existing infrastructure would be better utilised. The economic activity of such a program would boost employment and trigger significant economic growth in regional areas. The energy efficiency and ecological sustainability of the State's housing stock would be improved, the mix of housing types could be diversified to better reflect changing demographics, and housing prices would not skyrocket because of scare supply and overheated demand.

For all these reasons, it is high time that a program of planned and assisted relocation of existing coastal development threatened by coastal hazards is considered by the NSW Government, and adopted as a core component of the state's future coastal management policy framework.

ENDNOTES

See Intergovernmental Panel on Climate Change (IPCC) Climate Change 2013: The Physical Science Basis, contribution of Working Group I to the Fifth Assessment Report (AR5) of the IPCC (2013) chapters 11 and 12. Available at < http://www.ipcc.ch/report/ar5/wg1/#.Um8C-xS4b5p>

Coastal Council of NSW Annual Report 1999-2000 (2000), 31 and Maps 5-8, 39-42.

³ There are many examples of this on the north coast including Belongil Spit in Byron Shire and Wooli village in Clarence Valley Council. The local government areas of Lake Macquarie, Wyong, Gosford, Wollongong, Shoalhaven and Rockdale have been identified as areas facing the greatest level of risk. Many buildings used for infrastructure, public amenity, commercial or industrial purposes are also at risk. See Australian Government Climate Change Risks to Australia's Coast: A first pass national assessment (Department of Climate Change, Canberra, 2009), at 77-85.

⁴ Ibid, 79.

⁵ See Department of Planning NSW Coastal Planning Guideline: Adapting to Sea Level Rise (2010).

⁶ Australian Government (2009), above n 3, 152.

Such as groynes, rock armouring, and / or seawalls. While these works are often euphemistically called 'coastal protection works' it is apparent that their construction will not 'protect' the coast from long-term geological processes, may increase erosion and produce a range of other adverse impacts incompatible with the notion of 'protection'.

See the list of considerations in NCCOE, Coastal Engineering Guidelines for working with the Australian coast in an ecologically sustainable way (Engineers Media, 2nd ed, 2012), 27-47.

⁹ See ss 55O – 55Z of the *Coastal Protection Act 1979* (NSW) as amended.

¹⁰ Not the least of which is where such works could be located, given ownership of land below MHWM reverts to the Crown as the State Government. See Environment Protection Authority v Leaghur Holdings PL [1995] 87 LGERA 282 NSW CCA

These potential impacts include: adverse impacts on public access to and along the foreshore, real threats to the persistence of beaches, important to public recreation and industries such as tourism, and threats to the survival of ecologically and or economically significant species, such as fish. Further, it is likely that coastal engineering works, rather than eliminate erosion, will instead increase erosion in some areas, through 'toe scour' and 'flanking' or 'end effect' erosion.

¹² It was to prevent such legal actions that the idea of co-ordinated, carefully considered coastal engineering works, fully assessed for their potentially adverse environmental impacts, as part of an overall coastal zone management plan, was conceived and built into the statutory framework.

The dangers of engendering a 'false sense of security' has been recognised by many writers. See Australian Government, above n 3, 152 and Orrin H Pilkey and Rob Young The Rising Sea (Island Press, 2009) 166.

¹⁴ Thus it's been estimated that by 2100, a sea level rise of 0.5m may see extreme events 'which now happen every 10 years would happen about every ten days'. See John A Church et al, 'Sea-level Rise' (2008) Chapter 12 in Peter W Newton (ed) Transitions: Pathways Towards Sustainable Urban Development in Australia, (CSIRO Publishing, 2008) 191, 198.

- ¹⁵ Intergovernmental Panel on Climate Change (IPCC) Climate Change 2007: The Physical Science Basis, Summary for Policymakers contribution of Working Group I to the Fourth Assessment Report of the IPCC (2007), 12,
- ¹⁶ A Barrie Pittock *Climate Change The Science, Impacts and Solutions* (2nd ed, CSIRO Publishing, Collingwood, 2009), 125, discussed the potential for rapid melting and ice sheet disintegration and concluded that if the Greenland and West Antarctic ice sheets 'more or less completely melted' the world could experience 'sea level rise of up to 10 to 12 metres lasting for millennia'.

See Australian Government (2009), above n 3, Appendix 1, Adaptation options for buildings protect, retreat, accommodate, 152.

See JAG Cooper and J McKenna, 'Social justice in coastal erosion management: The temporal and spatial dimensions' (2008) 39 *Geoforum* 294-306. ¹⁹ See eg Pilkey and Young (2009) above n 13.

²⁰ Eg The protest in 2002 of 'approximately 3,000 beach-loving residents of Warringah and adjoining councils' cited by BG Thom in 'Climate Change, Coastal Hazards and the Public Trust Doctrine' (2012) 8(2) *Macquarie Journal of International Comparative Environmental Law*, 21-41, at 21. ²¹ For eg raising floor levels in buildings with slab foundations is not practical.

- ²² This destabilised area which creates a hazard of building collapse is referred to the 'zone of slope adjustment' in NSW Government Coastline Management Manual (1990), C5, C21.

 23 See for eg the Byron Shire Council Development Control Plan (DCP) 2010 Chapter 1 Part J –
- Coastal Erosion Lands, adopted 3 March 2011, Development Standard J2.1, J4-J5
- ²⁴ See the Byron Shire Council Development Control Plan (DCP) 2010 Chapter 1 Part J Coastal Erosion Lands, adopted 3 March 2011, Development Standard J2.2, J5 - J6.

²⁵ Under the provisions of the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW).

- ²⁶An assessment in 2009 identified between 40,800 and 62,400 residential buildings in NSW as being likely to be affected by a 1.1m increase in sea level by 2100, with a replacement value of between \$12.4 and \$18.7 billion. See Australian Government, Climate Change Risks to Australia's Coast - A first pass national risk assessment (2009) 77, 79. No figures were provided for the number of nonresidential buildings at risk, or their replacement value, thus the potential liability for such a program of acquisition remains substantially under-estimated.
- The construction of coastal 'protection' works is a matter of discretion, where the Minister or the Expert Panel must 'be satisfied', the works 'should' be carried out, not a formal and inescapable Crown 'duty'. See ss 55, 55M of the Coastal Protection Act 1979 (NSW).

²⁸ See s 5 of the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW).

- ²⁹ See ss 11, 12 of the Land Acquisition (Just Terms Compensation) Act 1991 (NSW). The loss of land to the sea through the natural processes of coastal erosion, sea level rise and concomitant shoreline recession does not constitute action by a State agency authorised by legislation: hence the Act would not be triggered.

 30 Landowners have no 'right' to defend against the sea capable of being recognised or enforced by
- the courts, development applications for permanent coastal engineering works may be lawfully refused or may be granted under stringent conditions, and unless specific provisions to do so have been voluntarily enacted, neither the State or local government have an enforceable common law 'duty' to erect such works.
- Demands for compensation from the Commonwealth as a constitutional 'right' under s.51 (xxxi) of the Australian Constitution would be misconceived, and thus unsuccessful, since land lost to the sea and is gained by the Crown as the State Government and not by the Commonwealth. Further since such land ceases to be 'real property' when it falls below MHWM, it is likely that no acquisition of 'property' would be involved.
- Eg floating timber, or ceiling insulation, partially submerged masonry, concrete or brick foundations, roofing iron, protruding sewerage or plumbing pipes, cables, fencing wire etc.

Eg broken glass, shattered ceramic tiles, electrical wiring, metal guttering etc

- ³⁴ Eg wind borne sheets of roofing iron have the potential to seriously damage power-lines.
- ³⁵ Eg plastics, lead, copper, oils or chemicals such as PCBs in older style ceiling fans, pesticides under foundations etc. Septic tanks in particular have the potential to adversely affect the water quality of coastal waters.

 36 including fishing, wading, swimming, surfing, diving.

- ³⁷ Such as molluscs (oysters), crustaceans (crabs, prawns) and fish. Many marine species are highly sensitive to copper.
- Such as mangroves, salt marshes and sea grasses essential for fisheries, or birds providing ecological services such as control of midges, mosquitoes and other insect pests.

³⁹ either voluntarily, or involuntarily due to Council orders,

41 Such air pollution may constitute an offence under NSW environmental protection law. See s.126 of the Protection of the Environment Operations Act 1997 (NSW). The health risks posed by airborne asbestos fibres are well known and have been documented in the medical and scientific literature See < http://www.health.nsw.gov.au/environment/Pages/asbestos-and-health-risks.aspx >

⁴² See s 120 of the *Protection of the Environmental Operations Act 1997* (NSW)

⁴³ Or plausibly denied, or wished away as a temporary phenomenon, likely to be soon reversed.

44 which are doomed to be ineffective in the middle to long term, as sea level continue to rise, storminess increases and shorelines continue to retreat.

45 Under s 34 of the *Crown Lands Act 1989* (NSW) the Minister has the power to exchange Crown land, while ss134, 135 and 137 allows the Minister to accept gifts of land under agreed conditions, acquire land by agreement or accept the surrender of land.

46 Under the Environmental Planning and Assessment Act 1979 (NSW)

⁴⁷ Under the Real Property Act 1900 (NSW)

⁴⁸ Under the *Crown Lands Act 1989* (NSW)

⁴⁹ See NSW Government, Department of Planning Far North Coast Regional Strategy 2006-2031 (2006), which sets targets for local government areas on the FNC totalling 51,000 additional new dwellings to accommodate an increase in population of 60,400 people, 27. The corresponding plan for the Mid North Coast seeks 59,600 additional new dwellings to cater for an anticipated growth in population of 94,000 people. Other targets for other coastal regions of NSW have also been set. See < http://www.planning.nsw.gov.au/regional-strategies >

See Appendix 1 -Sustainability criteria in NSW Government, Department of Planning Far North Coast Regional Strategy 2006-2031 (2006), 45-6.

- ⁵¹ Between 40,000 and 63,000 'replacement' allotments would be needed in NSW by 2100, if the Australian Government's assessment of residential properties at risk in NSW were relied upon. See Australian Government (2009) above n 3, 77-79. Plus the additional 110,000 new dwellings required by 2031 to cater for anticipated population growth in the Mid and Far North Coast regions alone. = > 150,000.
- At full market value as unimproved land, under the *Land Acquisition (Just Terms Compensation)*
- Act 1991 (NSW). Such a view is contestable, since there are many properties at risk which have been for sale for some time, but have attracted little, if any, interest, eq Wooli village. This indicates that the owners want out but cannot find a buyer.

⁵⁴ This would be apt because no 'real property' would be acquired. See the discussion of this in John R Corkill 'Claimed property right does not hold water' (2013) 87 Australian Law Journal 49-58. 56-7.

The use of incentive payments would be consistent with the principle of ecologically sustainable development (d) improved valuation, pricing and incentive mechanisms, cited in s 6(2) of the Administration the Environment Protection of Act (NSW); http://www.austlii.edu.au/au/legis/nsw/consol act/poteaa1991485/s6.html >

since they would not be 'compensation' as such.

⁵⁷ Say, \$100,000.

A reduced 'incentive payment' of, say, \$50,000 could be paid for a delayed entry into the land exchange program, where the Crown retains some flexibility as to demolition and clean up and / or where a substantial area of land is surrendered, sufficient to permit some revenue generating interim uses and/or dedication for public purposes.

⁵⁹ Say, \$10,000.

60 See eq Environment Protection Authority v Saunders (1994) 6 BPR 13,655; Environment Protection Authority v Leaghur Holdings PL [1995] 87 LGERA 282 NSW CCA.

Fibro was a common building material in such structures from the 1950s onwards. The use of asbestos in building materials such as cladding, roofing, guttering etc only began to be phased out in the 1980s. See < http://asbestosremovalguide.com/446/how-to-identify-asbestos-fibro-cladding/ >