Disconnecting a catchment to save the creek - lessons learnt - Dobsons Creek Disconnection Project

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Biography:
Matt Potter:
Matt has worked across technical, strategic and innovative urban stormwater management and integrated water cycle management over the last 17 years. Matt has recently undertaken the finalisation and evaluation of the Dobsons Creek Disconnection Project while at Knox Council. Prior to this Matt led advocacy, strategy and regulatory reform for stormwater management and waterway health at Melbourne Water.

Abstract:
In 2010, Melbourne Water, Knox City Council and South East Water initiated a pilot program to retrofit the Dobsons Creek catchment with stormwater disconnection measures.
The project provides the knowledge and insights to guide further stream flow protection for both priority partially urbanised catchments and those yet to be urbanised.

Key outcomes:
- DCI% for the catchment reduced to less than 1% in the full catchment, 1.4% in the smaller main monitoring catchment, low enough to test if disconnection returns streams to near natural state
- Council treatments – biofilters, rain gardens and swales.
- Tanks for Helping Your Creek:
  214 properties SEW 2012-2013,
33 properties Melbourne Water MBI auction, 2015-2017
- Community engagement with the creek and stormwater management has improved
- Free tank offer captured 50% of properties and was more cost effective than the Market Based Instrument offer
- Tank maintenance is variable and willingness to repair pumps is very low
- Wicks Reserve biofilter has outstanding water quality results

Legacy Issues:
- No effective planning control to manage incremental development
- No effective regime to maintain private tank functionality into the future
- Ongoing monitoring required

Learnings:
- Applicable to small catchments with starting DCI% around 2-4%.
- Early establishment of the catchment condition and priority stream sections and clear and agreed objectives are critical to achieving project outcomes in a timely and economically efficient way

- Melbourne Water is the lead agency and LGAs are key partners
- Business plan detailing DCI% to be achieved, total budget, expected timeframe, committed funding prior to forming partnerships
- A multi-partner delivery model encourages collaboration, allowing organisations to draw on a variety of expertise and deliver efficient community programs.
- A central coordinating role and governance structure is critical to ensure consistency and momentum across the lifespan of the project
- Specific planning controls should be in place or in development addressing development sub 50m2 e.g. LSBC ESO
- Require large scale Council treatments and distributed tanks and infiltration
- Council systems are the least cost and most sustainable systems – but poor at volume reduction
- Tank installations –needed to provide harvesting and baseflow recharge
- Achieving optimal volume reduction is not realistic in retrofits Consider greater incentives to improve tank uptake
- Establish a functional maintenance regime