

**Byron Shire Council - 2022 - Whole Flood Mitigation Program' (E2022/52007)**

	Floodplain Management Plan	Proposed Mitigation Action	Priority	Responsibility	Approx Value	Comments
1	North Byron	Flood Planning Levels revised based on the recommendations of the FRMS.	Complete	Complete	Staff Time	Complete
2	North Byron	Section 10.7 (5) certificates to provide further detail of flood behaviour. Consideration to providing property-level flood information via an online GIS platform	Complete	Complete	Staff Time	Complete
3	North Byron	Byron Shire Council and SES to consider the findings and recommendations of the FRMS in the development of the Flood Warning Network for North Byron.	Complete	Complete	Staff Time	Complete
4	North Byron	Identify key roads and implement automatic warning signs and depth indicators.	High	BSC - IPT	\$100,000	Grant being investigated
5	North Byron	Council consider updating the DCP to incorporate the recommendations detailed in the FRMS; Provide more detailed guidance on the principles of wet proofing, appropriate design and materials, with direct reference to available guidelines; include a requirement for an assessment of property level protection as part of the DCP2014 planning matrix criteria FL4; Implement the recommendations regarding appropriate fill areas in the DCP2014	Partially complete	BSC - SEE / IPT	Staff Time	To be discussed with SEE
6	North Byron	Development a whole of catchment drainage model and overland flow path investigation.	High Priority	BSC - IPT	\$250,000	2:1 grant submitted May 22
7	North Byron	Undertake more detailed assessment of properties which may benefit from property level protection	High	BSC - IPT	\$50,000	Will form part of the scope of Shire overland flow path study
8	North Byron	Implement debris control measures for Federation Bridge and Billinudgel Railway Bridge.	Design underway	BSC - IPT	\$100,000	Grant funded for design phase only
9	North Byron	Undertake an Evacuation Assessment for Mullumbimby.	High Priority	SES (tech intel from IPT)	Staff Time	Underway by SES
10	North Byron	Changes to land use zoning should consider flood compatibility based on the recommendations of the FRMS.	Complete	Complete	Staff Time	Complete
11	North Byron	Further investigate raising eligible residential properties to reduce flood damages.	Moderate	BSC - IPT	Staff Time (pending Council decision on VHR Council/State contribution)	Underway as part of VHR/VHP scheme
12	North Byron	Further detailed assessment of Saltwater Creek upgrade assessment and mitigation options for Mullumbimby.	Moderate	BSC - IPT	Refer to item 6	Will form part of the scope of Shire overland flow path study
13	North Byron	Form a committee, comprising council, state, emergency services and community member representatives to oversee the implementation of the FRMP	Complete	Complete	Complete	Complete
14	North Byron	Council and the SES to update the Local Flood Plan based on findings of the FRMS.	Moderate	SES (tech intel from IPT)	Staff Time	Underway by SES
15	North Byron	Revise the Flood Planning Area based on the recommendations of the FRMS.	Complete	Complete	Staff Time	Complete
16	North Byron	Engage with the community to prepare an ongoing flood education program, with appropriate evaluation by Council and SES following implementation.	Moderate	SES/BSC - IPT / Comms	\$20,000	Funding to be sought
17	North Byron	Further consideration of Avocado Court drainage modification.	Moderate	BSC - IPT	Refer to item 6	Will form part of the scope of Shire overland flow path study
18	North Byron	Byron Shire Council compliance team investigate illegal builds south of North Heads Road.	Ongoing	BSC - SEE	Staff Time	To be discussed with SEE
19	North Byron	Develop a sediment transport model to investigate modification to the rock walls, as part of the Coastal Management Program for the Brunswick Estuary.	Moderate	BSC - SEE / IPT	\$150,000	Being considered as part Coastal Management Plan
20	North Byron	Further consideration of Billinudgel infrastructure improvements.	Moderate	BSC - IPT	Refer to item 6	Will form part of the scope of Shire overland flow path study
21	North Byron	Develop guidance on the design and installation of fencing traversing waterways and channels.	Moderate	BSC - IPT	\$15,000	Funding to be sought

22	North Byron	Consider establishing a Voluntary House Purchase scheme for eligible properties.	Complete	BSC - IPT	Staff Time (pending Council decision on VHR Council/State contribution)	Grant submitted May 22
23	North Byron	More detailed assessment of potential raising of River Street to provide improved flood immunity and evacuation.	Low	BSC - IPT	Refer to item 6	Will form part of the scope of Shire overland flow path study
24	North Byron	Implement the recommendations of the South Golden Beach levee audit.	Low	BSC - IPT	\$200,000	Funding to be sought
25	North Byron	Further consider viable options to implement the recommendations of the New City Road drainage assessment.	Low	BSC - IPT	Refer to item 6	Will form part of the scope of Shire overland flow path study
26	Tallow Creek	New Byron Local Environment Plan to more robustly protect existing development from increased flooding impacts resulting from future development and update to be in line with NSW Floodplain Development Manual (2005)	Complete	Complete	Staff Time	Complete
27	Tallow Creek	Commence undertaking to rezone the land identified as high flood hazard for the 1 in 100 year ARI flood to preclude these areas from future development	Complete	Complete	Staff Time	Complete
28	Tallow Creek	Adopt FPLs as part of the DCP 2002 as the extent of flood prone land in the Tallow Creek catchment that consider climate change conditions (Scenario 4)	Complete	Complete	Staff Time	Complete
29	Tallow Creek	Implementation of design measures and evacuation plans to minimise impacts on future planned community uses as identified in the DCP No. 9	Medium Priority	BSC - SEE	Staff Time	To be discussed with SEE
30	Tallow Creek	Adopt prescribed areas of fill exclusion.	Complete	Complete	Staff Time	Complete
31	Tallow Creek	Ensure future developments within the catchment utilise on-site stormwater detention measures to maintain pre-development peak runoff characteristics.	Complete	Complete	Staff Time	Already part of BSC DCP
32	Tallow Creek	Prepare a section contribution plan for all civil works in this plan.	Complete	Complete	\$20,000	Wasn't supported or adopted by Council
33	Tallow Creek	Update 149 certificates and any lots with additional controls over them, including add 1495 certificates for lots effected by PMF and not within the FPL.	Complete	Complete	Staff Time	Complete
34	Tallow Creek	Adopt new version of the hydraulic model to allow for assessment of all proposed development	Complete	Complete	Staff Time	Complete
35	Tallow Creek	Establish relationship between flood return period, sand bar levels and flooding conditions in Tallow Lake to assist in SES flood evacuation planning	Underway	BSC - IPT	\$15,000	Contract awarded.
36	Tallow Creek	Support SES in inclusion of Suffolk Park in Flood Response Plan	Complete	SES (tech intel from BSC)	Staff Time	To be discussed with SES
37	Tallow Creek	Install flood gauge at Broken Head Road culvert showing example flood levels	Underway	BSC - IPT	\$500	To be completed in June 2022
38	Tallow Creek	Install lake level and rainfall monitoring station on Tallow Lake and connect to Council's flood warning system	Complete	Complete	\$25,000	Complete
39	Tallow Creek	Upgrade Broken Head Road Crossing of South Tallow Creek	Medium Priority	BSC - IPT	\$355,000	2009 price - needs to be increased to current day value
40	Tallow Creek	Upgrade Coogera Circuit Detention	Medium Priority	BSC - IPT	\$380,000	2010 price - needs to be increased to current day value
41	Tallow Creek	Raise footpath at Tallow Lake footbridge to ensure trafficable up to a lake level of 2.5mAHD.	Complete	Complete	\$44,000	Complete
42	Tallow Creek	Develop and implement asset management and maintenance plan	Complete	Complete	\$20,000	Complete
43	Tallow Creek	Implement interim management plan through water level and quality monitoring	Complete	Complete	\$100,000	Complete
44	Tallow Creek	Develop data collection program for variables such as sand bar and lake stored level, to support development of long-term management plan.	Complete	Complete	Staff Time	Complete
45	Tallow Creek	Inspect the sand bar and record its level every year prior to the onset of the rainfall season	Complete	Complete	Staff Time	Complete
46	Tallow Creek	Monitor the level of the opening during the rainfall season and undertake maintenance earthworks to restore the level as per the accepted Interim Sandbar Management Strategy.	Complete	Complete	Staff Time	Complete
47	Tallow Creek	Update Council Geographic Information Systems (GIS) to include outputs of this plan and update any lots with additional controls over them.	Complete	Complete	Staff Time	Complete
48	Tallow Creek	Ensure authority uses the GIS layers to prepare property reports.	Complete	Complete	Staff Time	Complete
49	Tallow Creek	Add adopted document to Council's website, plus additional A1 pdf of FPL	Complete	Complete	Staff Time	Complete

50	Belongil Creek	Preferred Byron Drainage Strategy	Immediate Priority	BSC - IPT	\$1,300,000	Grant awarded for design phase only. Contract award by August 22
51	Belongil Creek	Preferred Byron Drainage Strategy Construction	High Priority	BSC - IPT	\$15,000,000	Grant awarded for design phase only. Contract award by August 23. Construction phase grant application required.
52	Belongil Creek	Development Controls	Complete	Complete	Staff Time	Complete
53	Belongil Creek	Community Flood Awareness	Immediate Priority	BSC - IPT / Comms	\$10,000	Funding to be sought
54	Belongil Creek	Emergency Planning ( SMS Messaging)	Complete	Complete	\$220,000	As part of flood warning network and emergency dashboard
55	Belongil Creek	Flood Information Dataset	Complete	Complete	\$220,000	As part of flood warning network and emergency dashboard
56	Belongil Creek	Belongil Creek Entrance Strategy	Complete	Complete	\$125,000	Complete
57	Belongil Creek	Flood Gauges	Complete	Complete	\$75,000	This is always ongoing, upgrading gauges/telemetry etc
58	Belongil Creek	Drainage Infrastructure Maintenance	High Priority	BSC - Operations	\$1,092,400	One of clean of main drains in Byron Bay
59	Belongil Creek	Voluntary House Raising Scheme	Medium Priority	BSC - IPT	\$8,550,000	Grant submitted May 22 for 2/3 funding for upto 2 houses. Total Scheme is 57 houses at \$150 per house.
60	Staff Recommended Not Supported By A Plan	SGB Flood Pump Generator	Funded	BSC - IPT	\$140,000	Protection from power failures.
61	Staff Recommended Not Supported By A Plan	Investigate Options for SGB Flood Gate Upgrades	High Priority	BSC - IPT	\$30,000	Better solutions? No pipes? flood gates with automated knife valves for full closure?
62	Staff Recommended Not Supported By A Plan	Design SGB and Fern Beach Flood Levy Upgrades	High Priority	BSC - IPT	\$100,000	Levy over topped in 2022. Propose to raise Levy.
63	Staff Recommended Not Supported By A Plan	Investigate Flood Levey for Western SGB	Medium Priority	BSC - IPT	\$30,000	Post 2022 flood, investigate the benefits of a levy for west of Capricornia Canal.
<b>Total Program Value</b>					<b>\$27,587,900</b>	