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| **Wallabadah Sub-catchment site data collection sheet** | | | | | |
| **Contact: Brad Davies - adaptiv** | | **t: 0418 148 885** | **Email: adaptivbynature@gmail.com** | | |
| **Landholder:** Crown Land managed by NPWS/Forestry | | | **Date:** 28 March ‘20 | **Time:** 1330 -1345 | **Site Ref:** Nature Reserve 1 |
| **Landholding:** Wallabadah Nature Reserve | | |
| **Address:** Wallabadah Creek Road, Wallabadah via Creek Heights | | | **Email:** | | |
| **Lot:** | **DP:** | | **Mobile:** 0428658149 | | |
| **GPS Coordinates:** Refer to photo | | | **Observer/s: :** B. Davies/G. Macdonald | | |
| **Waterway Name:** Quirindi/Cutters Creek | | |  | | |
| **Project Reference:**  Inspected as part of WC tour.Recently burned in 2019/2020 bushfire season. Not extensively logged for over 30 years. Access work weed infestations apparent. | | | **Land use:**  □ Grazing (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_  □ Cropping  □ Irrigation  □ Urban  ☑ Native vegetation(specify): NA  □ Private conservation  ☑ Other: Public Reserve | | |
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| Figure 1: Is a view of Wallabadah Nature Reserve looking downstream Wallabadah catchment | | | | | |

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| **Soil type/landscape**  Soil landscape:  Geology:  Soil texture:  Notes: | | **Vegetation/Ground Cover**  Type:  Notes: |
| **Stream Style:**  □Gully  ☑Headwater  □Waterfall  □Gorge  ☑Laterally Confined  □Non-laterally Confined  □Valley Fill  ☑Channelised Fill  □Planform Controlled  ☑Bedrock Controlled  □Artificial  □Other:  Notes: High sinuosity laterally confirm fine grained headwater stream. | | **Channel features:**  ☑Pool  ☑Riffles  □Bar/s  □Benches  □Notches  □Scarps  ☑LWD  ☑Bedrock  □Grass swale  □Artificial  □Other:  Notes: Contour bank |
| **Floodplain features:**  ☑Paleochannels  □Ponds  □Bar/s  □Benches  □Terraces  □LWD  □Porous  □Other: contour bank  Notes: | | **Sinuosity** (1.0-1.05(Straight), 1.06-1.30(low sinuosity), 1.31-3.0(Sinuous, Meandering):  □ Straight  ☑ Low Sinuosity  □ Sinuous/Meandering  Notes:  **Stream order** No. 2nd |
| **Channel geometry**  Channel slope/gradient: Approx. 10%  Channel depth(m):  Channel width(m):  Floodplain width (m):  **Bank profiles:** (observations taken looking downstream)  □LB □RB □LB □RB □LB □RB □LB □RB □LB □RB  Concave Convex Vertical Planar Stepped | | **Catchment hydrology/hydraulics**  Elevation(m):m  Base of catchment: m Top of catchment: m  Theoretical ARI Qm/s3:(2yr)\_\_\_\_\_(10yr)\_\_\_\_\_\_(50yr)\_\_\_\_\_\_\_\_  Notes:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Observed flow:**  ☑No flow □Low □Moderate □High □Flooding  Notes:  **Groundwater:** Yes  **Bore:** NA |
| **Bed material:**  ☑Bedrock  □Boulder  □Cobble  ☑Gravel  □Sand  □Fine grained  □Organic  □Artificial  □Other  Notes:  Average Particle Size (B axis) (mm):  Sediment: Heavy clay | | **Bank material:**  ☑Bedrock  □Boulders  □Cobble  ☑Gravel  ☑Sand  ☑Fine grained  □Organic  □Artificial  □PESA  □Other  Cohesive or incohesive: Cohesive  Notes: |
| **Bed instability present?** (U/S, D/S and/or at the site)  □None  ☑Bed incision  ☑Headcut  □Tunnelling  □Gully Head  □Other  Notes: Localised | **Bank erosion present?** (U/S, D/S and/or at the site)  □None  ☑Slumping  ☑Undercutting  □Notch/scarp  □Rilling  □Surface stripping □Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Notes: Localised | **Tree fall/Woody Debris**  In channel: Yes ☑/ No □  Notes: |
| **Tree fall/Woody Debris**  Floodplain: Yes ☑ / No □ / NA □  Notes: |
| **Riparian Vegetation**  Riparian vegetation present? Yes ☑ / No □  Notes:  Species:  Too many to list | | **Floodplain vegetation present**  Floodplain vegetation present? Yes ☑/ No □  Notes:  Species:  Too many to list |
| **Site observations/discussions.** | | |
| The Reserve is generally in very good conditions. Recovery following the Dec 2019 fire has been outstanding, and the burn is possibly for many of the observations below. The channel network that was observed were in responsibly good condition.  Some key observations were:  Native vegetation was re-establishing well following the fires with no emergent weed issues. There is a large diversity of native vegetation which is regenerating. The only issue was weed prevalence on the disturbed country which has been exacerbated by fire trails during the fire. This may have a significant effect down catchment with travelling seeds, and NPWS may consider addressing this if asked.  Tree violet is common along the creek lines and is provided important habitat for small birds.  Fallen timber is naturally providing bed and bank protection. A number of examples were seen, which were trapping gravel and raising the creek bed. These trees fell into the creek from the floodplain. | | |
| **Potential Remediation Actions/ Priorities/ Works** | | |
| No obvious issues identified except weeds in newly disturbed country. Suggest WCCC ask NPWS to consider managing this and revegetating bare or weed covered areas to remove down catchment impact. It would not be a large job. | | |
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| **Inputs Required** | | |
| **NA** | | |