QUEENSLAND RECONSTRUCTION AUTHORITY

Photo evidence in submissions

For eligible events up to and including **31 October 2018** under the *Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination 2017*.

What photographic evidence is required to claim eligible costs?

To claim eligible costs for the restoration of an eligible asset for events activated under the *NDRRA Determination* 2017, submissions require supporting visual and geospatial evidence such as photos that show:

- post disaster damage to the asset is a direct result of an eligible disaster
- proposed or completed works are in line with the pre-disaster standard of the asset
- works have been completed in line with the approved scope.

Quality, well managed photographs are the best way to provide this evidence.

Checklist: What are assessors looking for in the submission photos?

For each asset

- quality photos showing damage good quality, clear, colour photos that show asset damage clearly caused by the eligible event and where the nature, extent and scope of the event damage and restoration works being claimed is defendable
- **GPS coordinates/metadata** included in each photo file
- □ **timeliness of photos** taken as soon as practicable following the event. The more time between the eligible event and date the photos are taken, the harder it is to demonstrate the damage was caused by the event.

Roads

- sequential geotagged photos along chainages to show assessors the extent of damage and enable the order of images to be identified
- close-up photos to show damage or damaged components for both event-related damage and predisaster standard
- chainage including orientation/compass to show assessors the damage as if they are walking from one end of the road to the other, with photos at set intervals along the damaged asset showing damage consistency and/or variances to support the required treatments.

Culverts, crossings, floodways and table drains

- damage and/or symptoms photos to assist assessors to see the damage to the eligible asset
- close-ups photos of damaged components to demonstrate to assessors all of the disaster-related damage to support each proposed treatment e.g. damaged head wall, wash out, rock protection, apron
- crossing photos of the asset to provide context for assessors including upstream and downstream, along road approaches of each damaged component
- **approach photos** to show assessors the damage from a distance and context of the road
- drainage photos to show assessors both the length of affected drain and close-ups of each damaged area/component.

Checklist: Planning for your photo shoot

- □ **camera choice** Use a GPS-enabled camera/device to capture the metadata and location of the event damage to the asset.
- □ camera settings all setting have been checked
 - Resolution is set to medium/high for quality photos.
 - GPS is on and reporting correct location.
 - Date and time are correct.
 - Photo direction/orientation functionality is enabled.
- **camera battery** the battery is fully charged and both the battery charger and back-up batteries are packed ready to go.
- memory card in the camera and a spare memory card is packed ready to go.
- **best time of day** early morning and late afternoon provide optimum contrast to capture damage in road surfaces but watch out for glare and dark shadows.
- angle of photos get down low to demonstrate distinctive damage features e.g. pavement deformation or washouts, to help to support proposed treatments.
- □ **highlight damage** where damage is hard to see consider highlighting with spray paint. Remember you are taking photos as evidence of: the location of the damage; which damage was caused by the event; the scope of damage.
- □ **size** use a ruler/tape measure to demonstrate depth/width/distance, and for large distances/widths, consider using a person/vehicle or other scalable feature to demonstrate size. If required use a straight edge to demonstrate damage and take a photo of the full straight edge.

Checklist: Completion and inspection photos

Photos have been taken when the project works are completed and include GPS coordinates/metadata in each photo file as required for close out.

Note: Completion and inspection photos may also be used as additional evidence if required to demonstrate asset condition should an asset be damaged by a subsequent event.

Checklist: Saving and managing photos

To assist councils and agencies to ensure submission photos can be assessed quickly and easily, it is suggested that you save photos in folders by asset using descriptive file names, e.g. asset name and chainage use clear file references and always back up your files.

Checklist advice for preparing, saving, and managing photos for bulk photo upload in MaRS includes:

- photos have unique names
- photos are JPEG format with embedded metadata
- □ file names are no more than 100 characters
- Excel submission form photo fields need to have unique file names in the following format: name|name|name
- photo conversion script can be requested via your RLO (if required)

Checklist: Other supporting evidence

□ Supporting evidence, other than photos, has also been considered for the submission e.g. flood mapping or pre-disaster inspection or maintenance reports.

Where there are (unintended) inconsistencies between these tip sheets, the Australia Government NDRRA Determination 2017 and the Queensland Disaster Relief and Recovery Guidelines, the Australia Government NDRRA Determination will prevail.



Best practice examples of photograpic evidence for submissions

Using a straight edge



Demonstrate extent of damage distance and good use of straight edge

Showing scope



Shows damage and that it extends into distance

Crossings and floodways



Provlde good overview of the crossing and approaches, including construction type



Use of straight edge to show damage close up

Showing small areas of damage



Marking out to show damage clearly and planned works



Provide good overview showing scouring



Close up of damage like this would need more photos if more work planned



Show damage clearly and extent into distance



Shows consistent damage into distance



Provides close-up of extent of damage

NDRRA TIP SHEET 3

Best practice examples of photographic evidence for submissions



Perspective of range of damage



Shows damage to component parts



Landslips



Shows damage and approach



Photo inside pipe work clearly showing damage





Landslips – show the context of slip in relation to the asset



Provides good supporting evidence



Shows damage and scope clearly



Use of tape to show damage to pipe



Sinkholes/blowholes

Use of post to demonstrate depth of subsidence

NDRRA TIP SHEET 3

Examples of unacceptable photographic evidence for submissions



Cannot see any significant damage directly related to the event nor can you get any perspective of the scale of defects or the location



Cannot see the damage to this floodway



Unable to see damage due to glare



Difficult to see any damage in this photo



Damage not apparent



Cannot make out damage to asset due to shadows



Damage not apparent



Photos through windscreens are difficult to assess as it is not possible to see clear damage or any scale of the damage



Cannot see the damage