Attachment 1: Comparison of existing EA conditions and Dam SMCs for CCA and Dam Design Plan

P-EA-100112777	Structures which are dams or levees constructed as part of environmentally relevant activities (ESR/2016/1934)
Assessment of Consequence Category	
(J1) The consequence category of any structure must be assessed by a suitably qualified and experienced person in accordance with the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures, as amended from time to time.	(X 1) The consequence category of any structure must be assessed by a suitably qualified and experienced person in accordance with the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/19335) at the following times: a) prior to the design and construction of the structure, if it is not an existing structure; or b) prior to any change in its purpose or the nature of its stored contents.
(J2) The consequence assessment required under condition (J1) must occur in any of the following situations: a) prior to the design and construction of the structure; b) prior to any change in its purpose or its stored contents; c) for a structure assessed and certified as a high or significant consequence structure, at least biennially after its construction.	
(J3) A consequence assessment report and certification must be prepared for any structure assessed and the report may include a consequence assessment for more than one structure.	(X 2) A consequence assessment report and certification must be prepared for each structure assessed and the report may include a consequence assessment for more than one structure.
(J4) On receipt, one paper copy and one electronic copy of the consequence assessment report and certification must be provided to the administering authority.	(X 3) Certification must be provided by the suitably qualified and experienced person who undertook the assessment, in the form set out in the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/19335)
(J5) All certifications must be provided by the suitably qualified and experienced person who undertook the assessment, in the form set out in the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures, as amended from time to time. Construction of Low Consequence Dam to Contain Wetting Front.	
Design and Construction of a Regulated Structure	
	(X 4) Conditions X5 to X9 inclusive do not apply to existing structures.
(J10) All regulated structures must be designed by and constructed under the supervision of a suitably qualified and experienced person in accordance with the requirements of the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures, as amended from time to time.	(X 5) All regulated structures must be designed by, and constructed under the supervision of, a suitably qualified and experienced person in accordance with the requirements of the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/19338).
(J11) Construction of a regulated structure is prohibited unless: a) a consequence category assessment report and certification has been submitted to the administering authority; b) a suitably qualified and experienced person has been commissioned to prepare a design plan for the structure; and c) the holder of the environmental authority has received the design plan for the structure, together with certification of that plan from the suitably qualified and experienced person, that: i. the design plan is in accordance with the requirements of the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures, as amended from time to time; ii. the structure is capable of delivering the performance stated in the design plan; and d) when constructed and operated in accordance with the design plan, the structure will be compliant in all respects with conditions to (J10) to (J18) of this environmental authority.	(X 6) Construction of a regulated structure is prohibited unless: a) the holder has submitted a consequence category assessment report and certification to the administering authority; and b) certification for the design, design plan and the associated operating procedures has been certified by a suitably qualified and experienced person in compliance with the relevant condition of this authority.

Operation of a Regulated Structure (J20) Operation of a regulated structure is prohibited unless: a) one paper copy and one electronic copy of the design plan and certification, and a set of 'as constructed' drawings and specifications has been submitted to the administering authority, together with certification that the structure: i. has been constructed in accordance with the design plan; ii. is capable of delivering the performance stated in the design plan; and iii. is compliant with the relevant conditions of this environmental authority; b) the conditions of this environmental authority relating to the construction of the structure have been met; and c) for regulated dams, the details required under this environmental authority have been entered into a Register of Regulated Dams.	(X 7) Certification must be provided by the suitably qualified and experienced person who oversees the preparation of the design plan in the form set out in the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/19338), and must be recorded in the Register of Regulated Structures. (X 9) Certification by the suitably qualified and experienced person who supervises the construction must be submitted to the administering authority on the completion of construction of the regulated structure, and state that: a) the 'as constructed' drawings and specifications meet the original intent of the design plan for that regulated structure b) construction of the regulated structure is in accordance with the design plan **Operation of a regulated structure** (X 11) Operation of a regulated structure, except for an existing structure, is prohibited unless the holder has submitted to the administering authority in respect of regulated structure, all of the following: a) one paper copy and one electronic copy of the design plan and certification of the 'design plan' in accordance with condition X6; b) a set of 'as constructed' drawings and specifications; c) certification of the 'as constructed drawings and specifications' in accordance with condition X9; d) where the regulated structure is to be managed as part of an integrated containment system for the purpose of sharing the DSA volume across the system, a copy of the certified system design plan; e) the requirements of this authority relating to the construction of the regulated structure have been met; f) the holder has entered the details required under this authority, into a Register of Regulated Structures; and g) there is a current operational plan for the regulated structure.
(J12) Regulated dams must be designed and constructed to prevent: a) floodwaters from entering the regulated structure from a watercourse or drainage line to the annual exceedance probability specified for determining spillway capacity in the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures, as amended from time to time; and b) wall failure due to erosion by floodwaters arising from the watercourse or drainage line to the annual exceedance probability specified for determining spillway capacity in the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures, as amended from time to time; and c) overtopping as a result of a flood event of the annual exceedence probability specified for determining spillway capacity in the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures, as amended from time to time.	(X 8) Regulated structures must: a) be designed and constructed in compliance with the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/19338); b) be designed and constructed with due consideration given to ensuring that the design integrity would not be compromised on account of: i) floodwaters from entering the regulated dam from any watercourse or drainage line; and ii) wall failure due to erosion by floodwaters arising from any watercourse or drainage line.