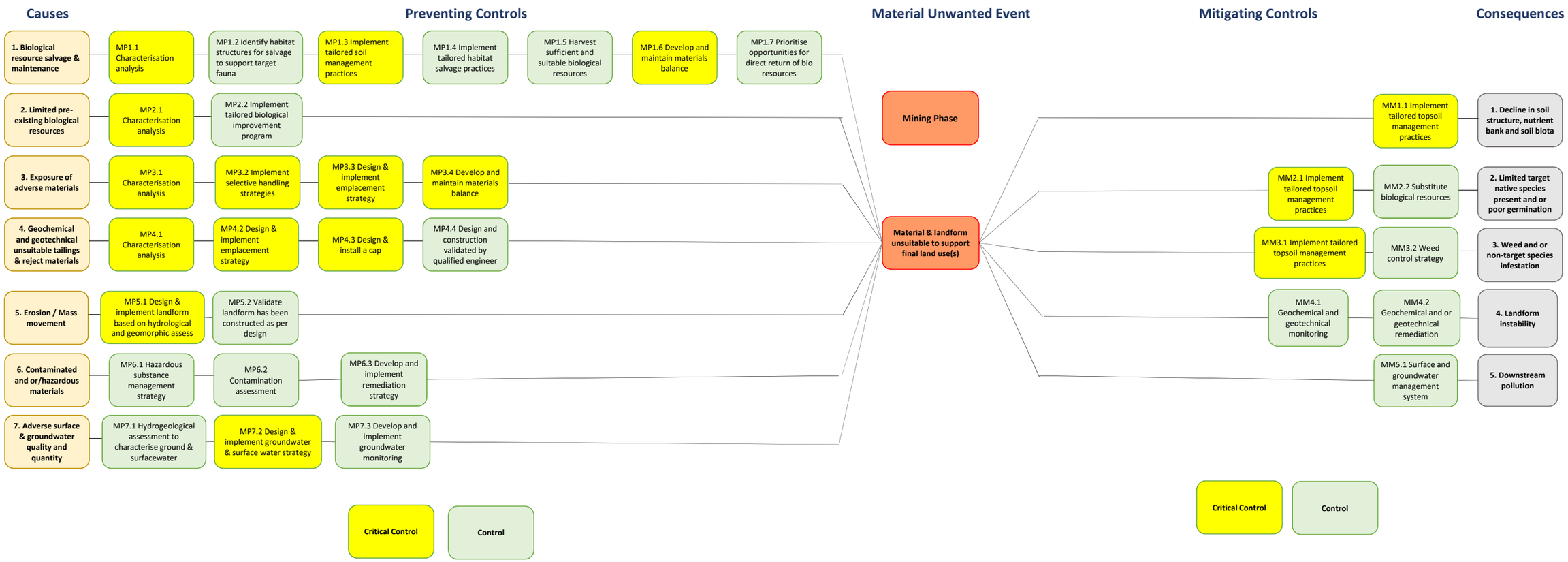
Causes
Preventing Controls
Material Unwanted Event
Mitigating Controls
Consequences
1. Biological resource salvage & maintenance
MP1.1 Characterisation analysis
MP1.2 Identify habitat structures for salvage to support target fauna
MP1.3 Implement tailored soil management practices
MP1.4 Implement tailored habitat salvage practices
MP1.5 Harvest sufficient and suitable biological resources
MP1.6 Develop and maintain materials balance
MP1.7 Prioritise opportunities for direct return of bio resources
2. Limited pre-existing biological resources
MP2.1 Characterisation analysis
MP2.2 Implement tailored biological improvement program
3. Exposure of adverse materials
MP3.1 Characterisation analysis
MP3.2 Implement selective handling strategies
MP3.3 Design & implement emplacement strategy
MP3.4 Develop and maintain materials balance
4. Geochemical and geotechnical unsuitable tailings & reject materials
MP4.1 Characterisation analysis
MP4.2 Design & implement emplacement strategy
MP4.3 Design & install a cap
MP4.4 Design and construction validated by qualified engineer
5. Erosion / Mass movement
MP5.1 Design & implement landform based on hydrological and geomorphic assess
MP5.2 Validate landform has been constructed as per design
6. Contaminated and or/hazardous materials
MP6.1 Hazardous substance management strategy
MP6.2 Contamination assessment
MP6.3 Develop and implement remediation strategy
7. Adverse surface & groundwater quality and quantity
MP7.1 Hydrogeological assessment to characterise ground & surfacewater
MP7.2 Design & implement groundwater & surface water strategy
MP7.3 Develop and implement groundwater monitoring
Mining Phase
Material & landform unsuitable to support final land use(s)
MM1.1 Implement tailored topsoil management practices
1. Decline in soil structure, nutrient bank and soil biota
MM2.1 Implement tailored topsoil management practices
MM2.2 Substitute biological resources
2. Limited target native species present and or poor germination
MM3.1 Implement tailored topsoil management practices
MM3.2 Weed control strategy
3. Weed and or non-target species infestation
MM4.1 Geochemical and geotechnical monitoring
MM4.2 Geochemical and or geotechnical remediation
4. Landform instability
MM5.1 Surface and groundwater management system
5. Downstream pollution
Critical Control
Control
Critical Control
Control