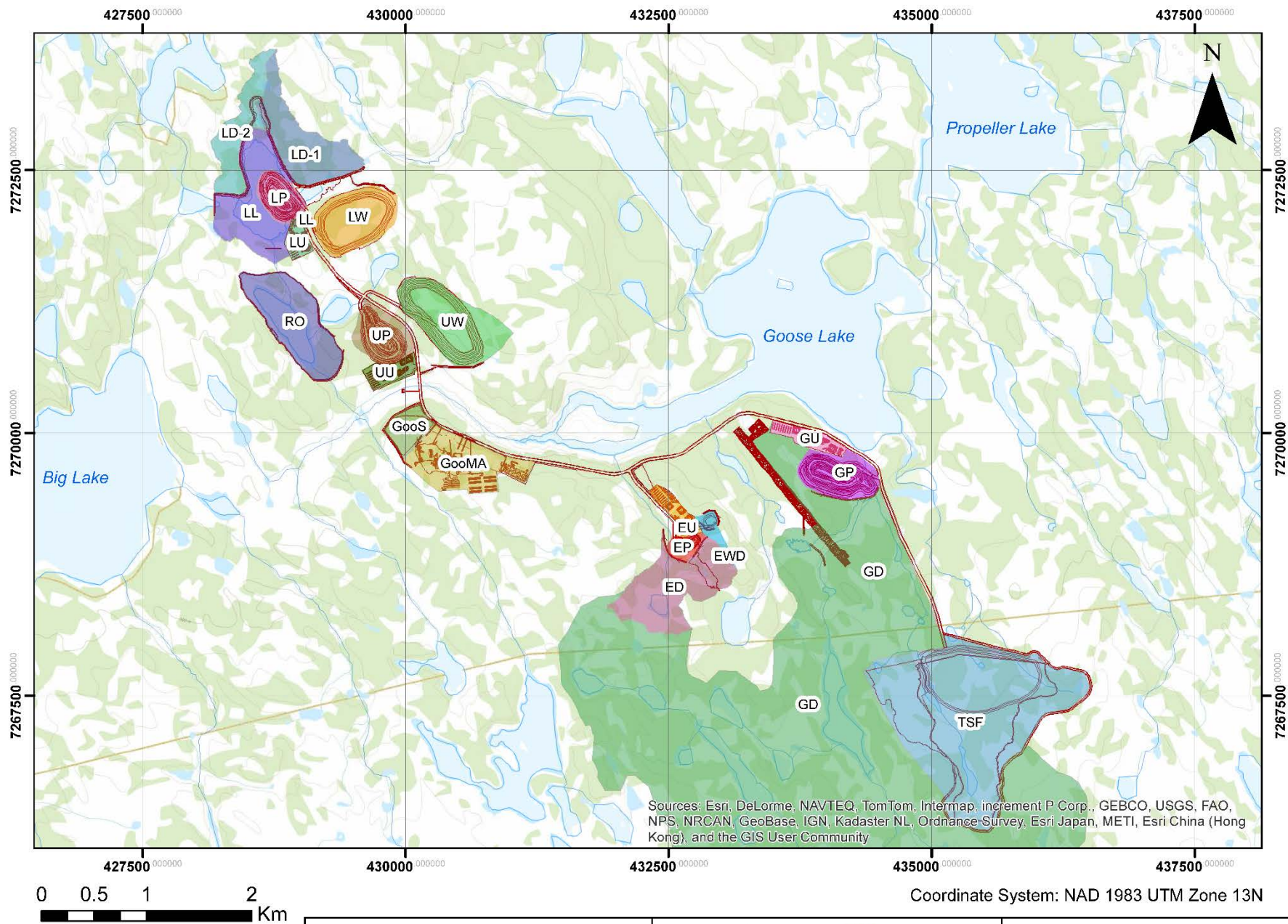




Water and Load Balance Report

Goose Property Catchment Delineation

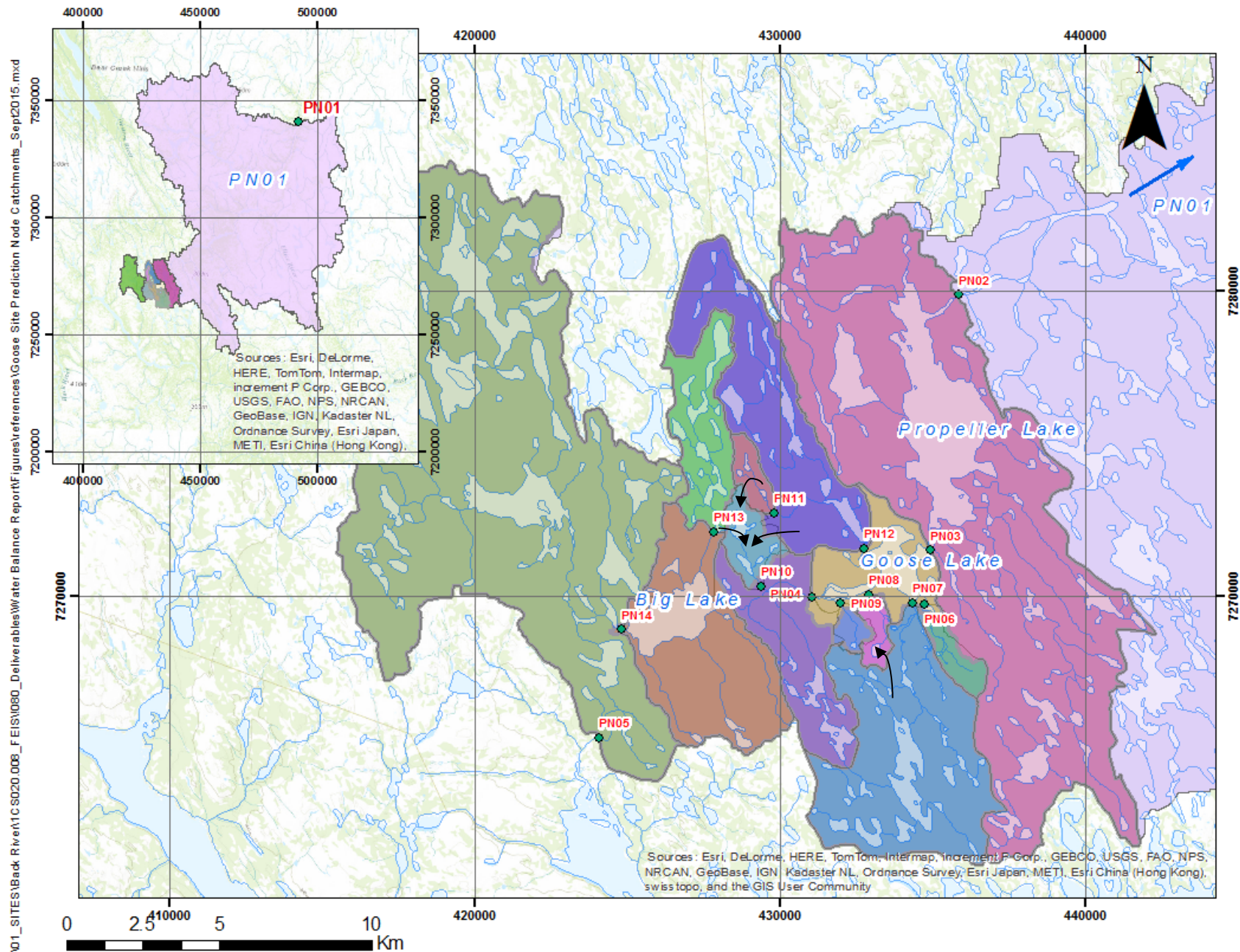
Job No: 1CS020.008
Filename: Figures.pptx

Back River Project

Date: September 2015

Approved: SPB

Figure: **3-1**



Watershed Spill

srk consulting

Sabina
GOLD & SILVER CORP.

Water and Load Balance Report

Location of Prediction Nodes

Job No: 1CS020.008

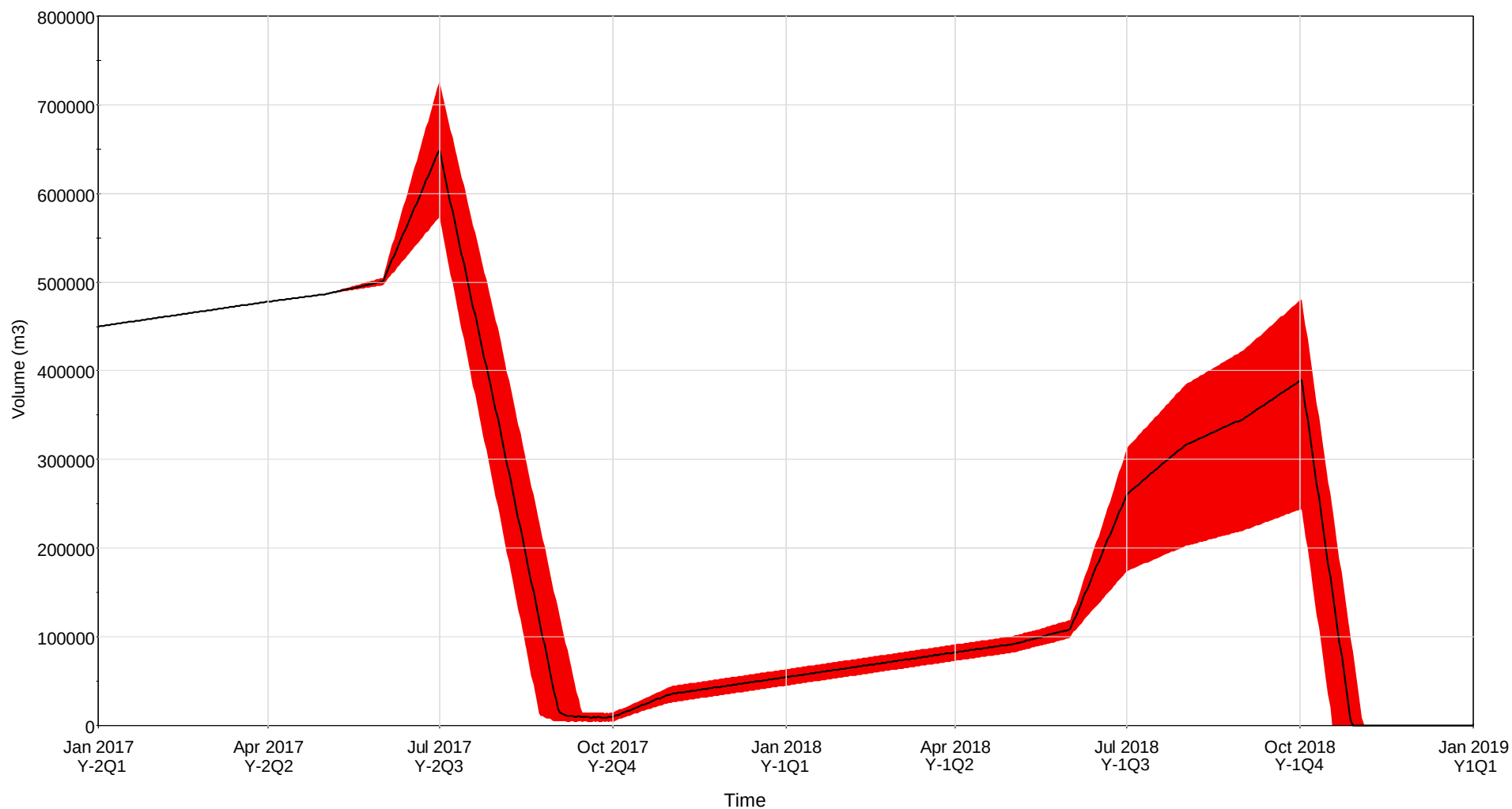
Filename: Figures.pptx

Back River Project

Date:
September 2015

Approved:
SPB

Figure: **3-2**



Statistics for Llama Lake Volume
 5%..95% 50%



Job No: 1CS020.008
 Filename: WaterBalanceFigures.pptx



Back River Project

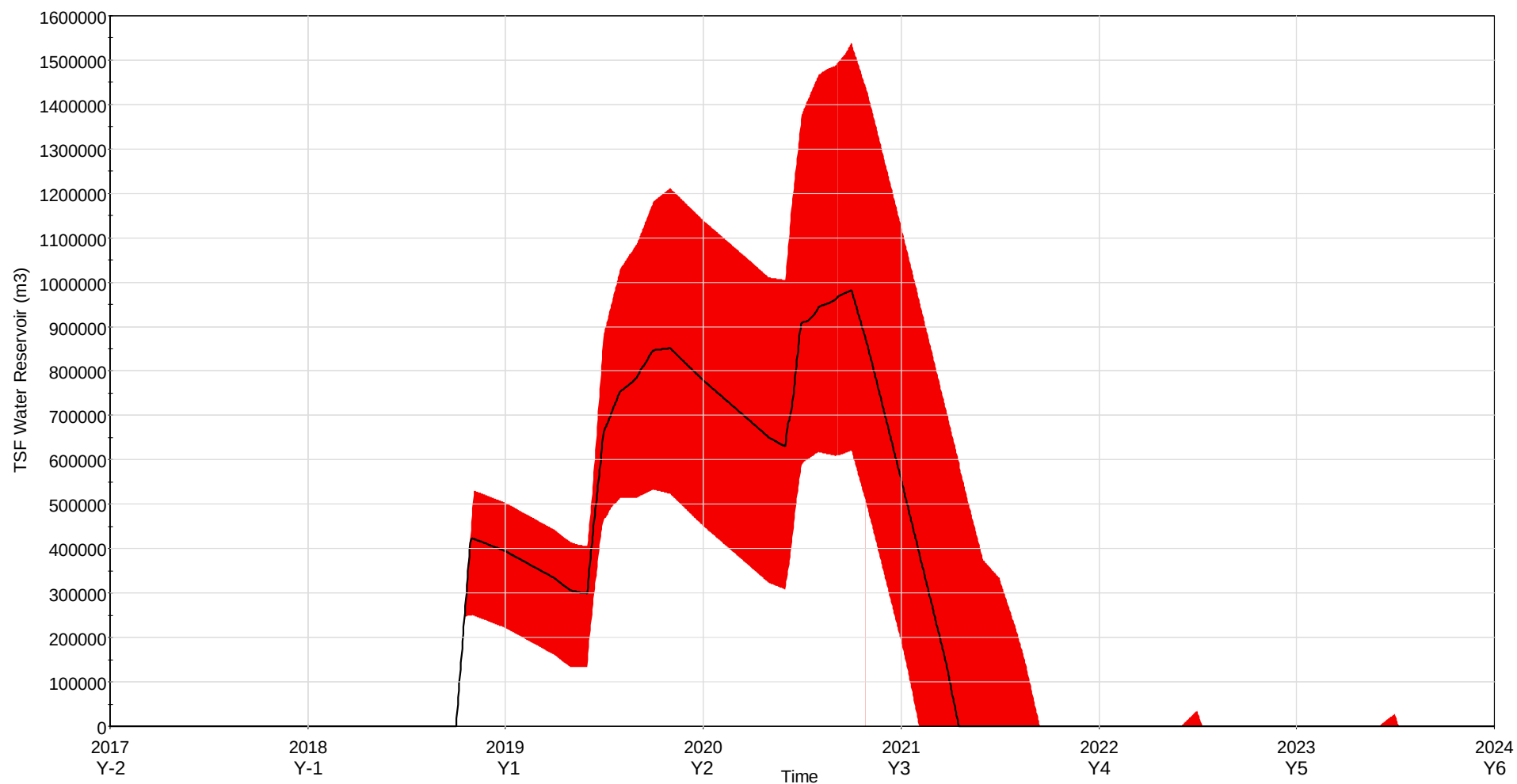
Water and Load Balance Report

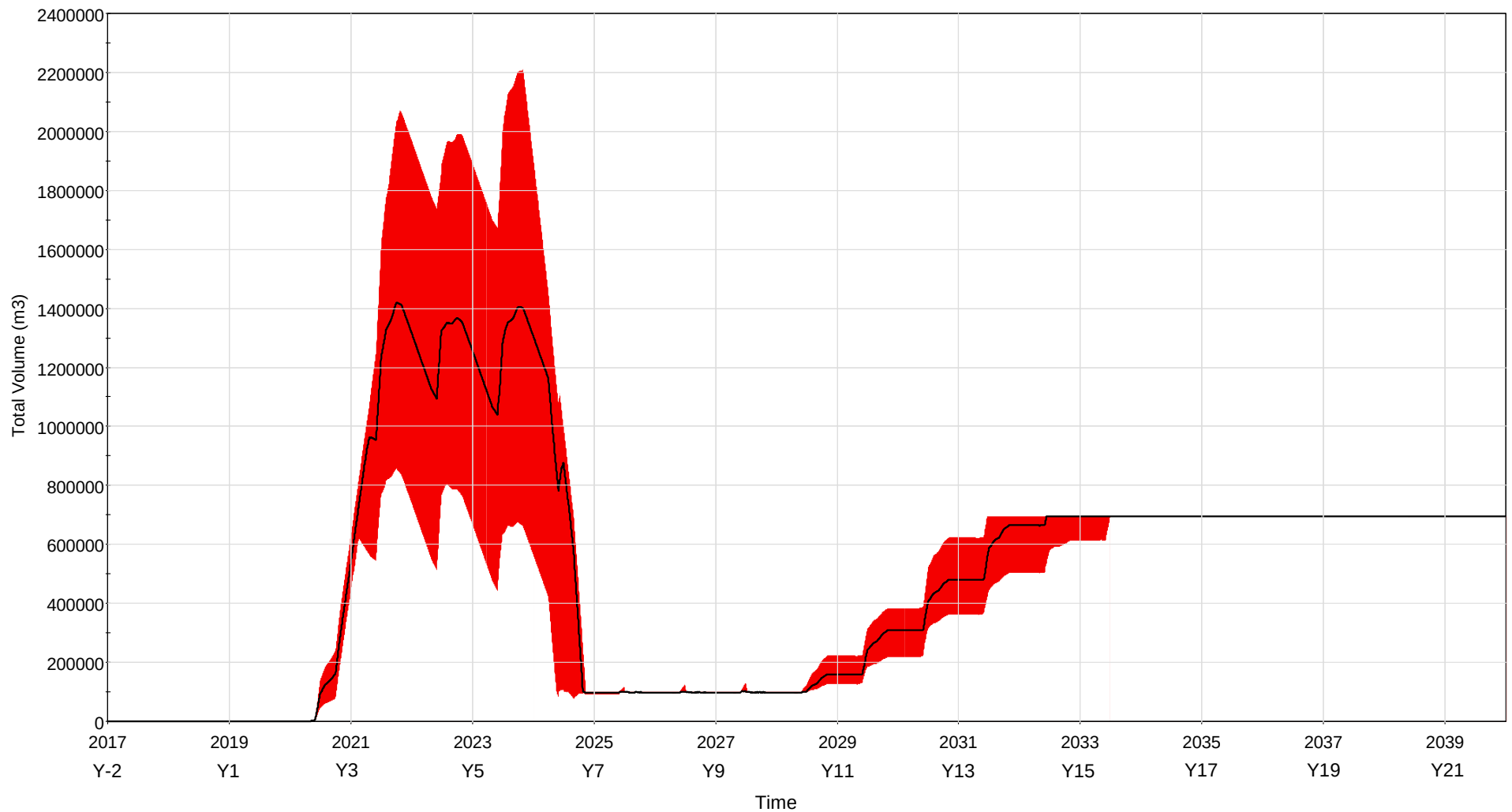
Llama Lake Storage Volume

Date:
September 2015

Approved:
SPB

Figure: **6-1**





Statistics for Umwelt_TSF
 5%..95% 50%



Job No: 1CS020.008
 Filename: WaterBalanceFigures.pptx



Back River Project

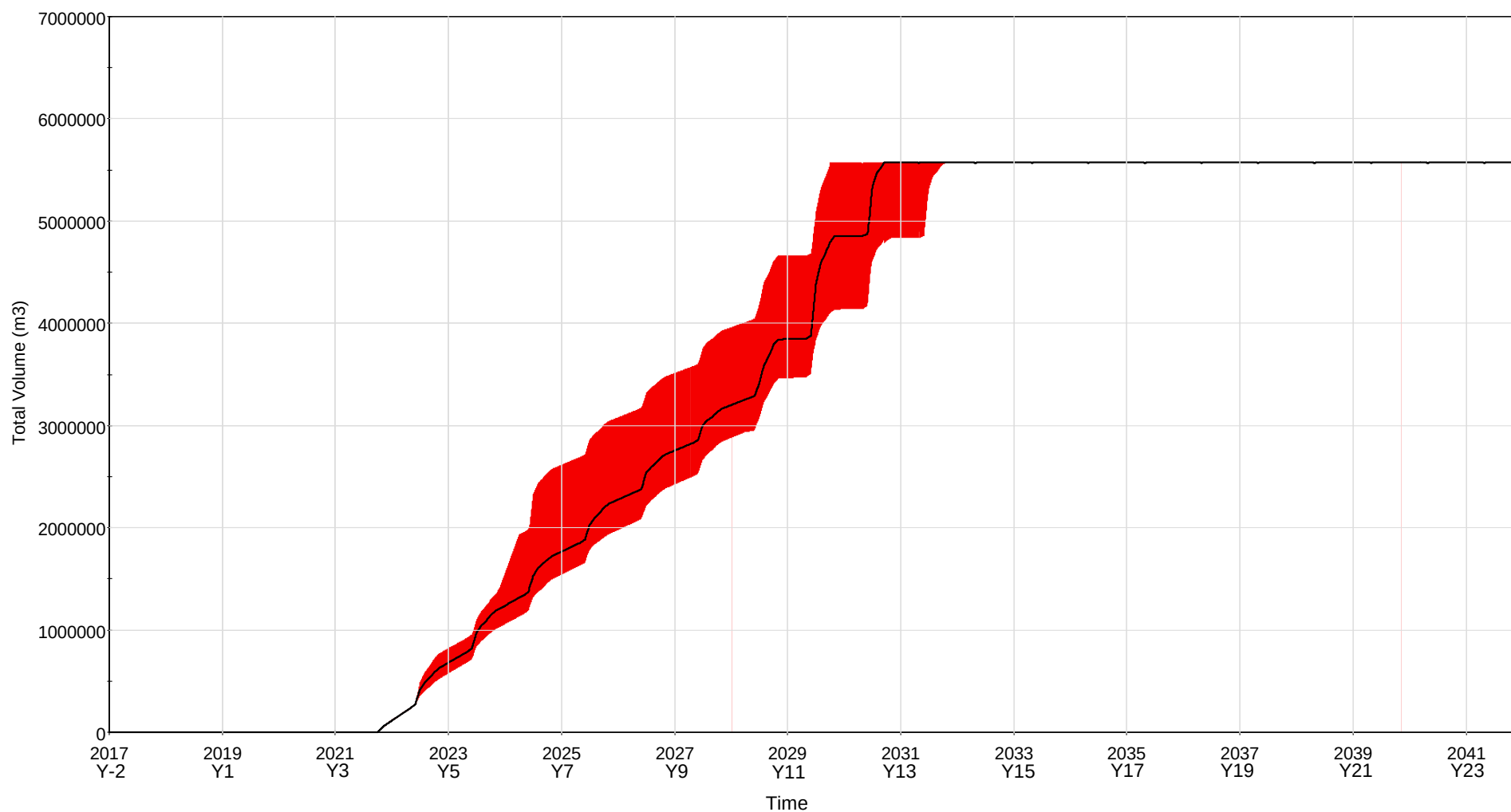
Water and Load Balance Report

Umwelt TF Water Storage Volume

Date:
September 2015

Approved:
SPB

Figure: **6-3**



Statistics for Live_Vol_Llama_TSF
 5%..95% 50%



Water and Load Balance Report

Llama Reservoir Storage Volume

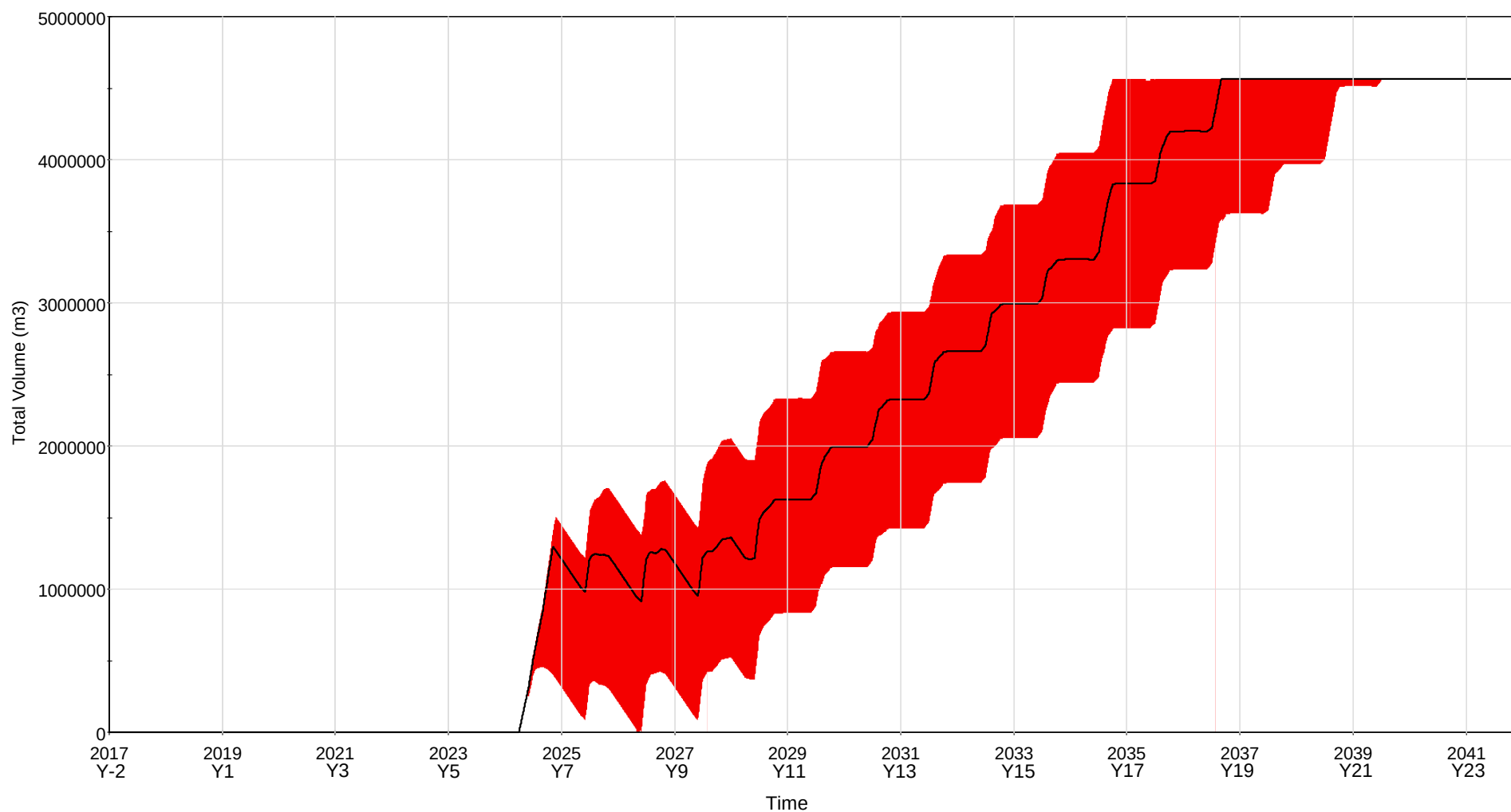
Job No: 1CS020.008
 Filename: WaterBalanceFigures.pptx

Back River Project

Date:
September 2015

Approved:
SPB

Figure: **6-4**



Statistics for Goose_TSF_Reservoir
 5%..95% 50%



Water and Load Balance Report

Goose TF Storage Volume

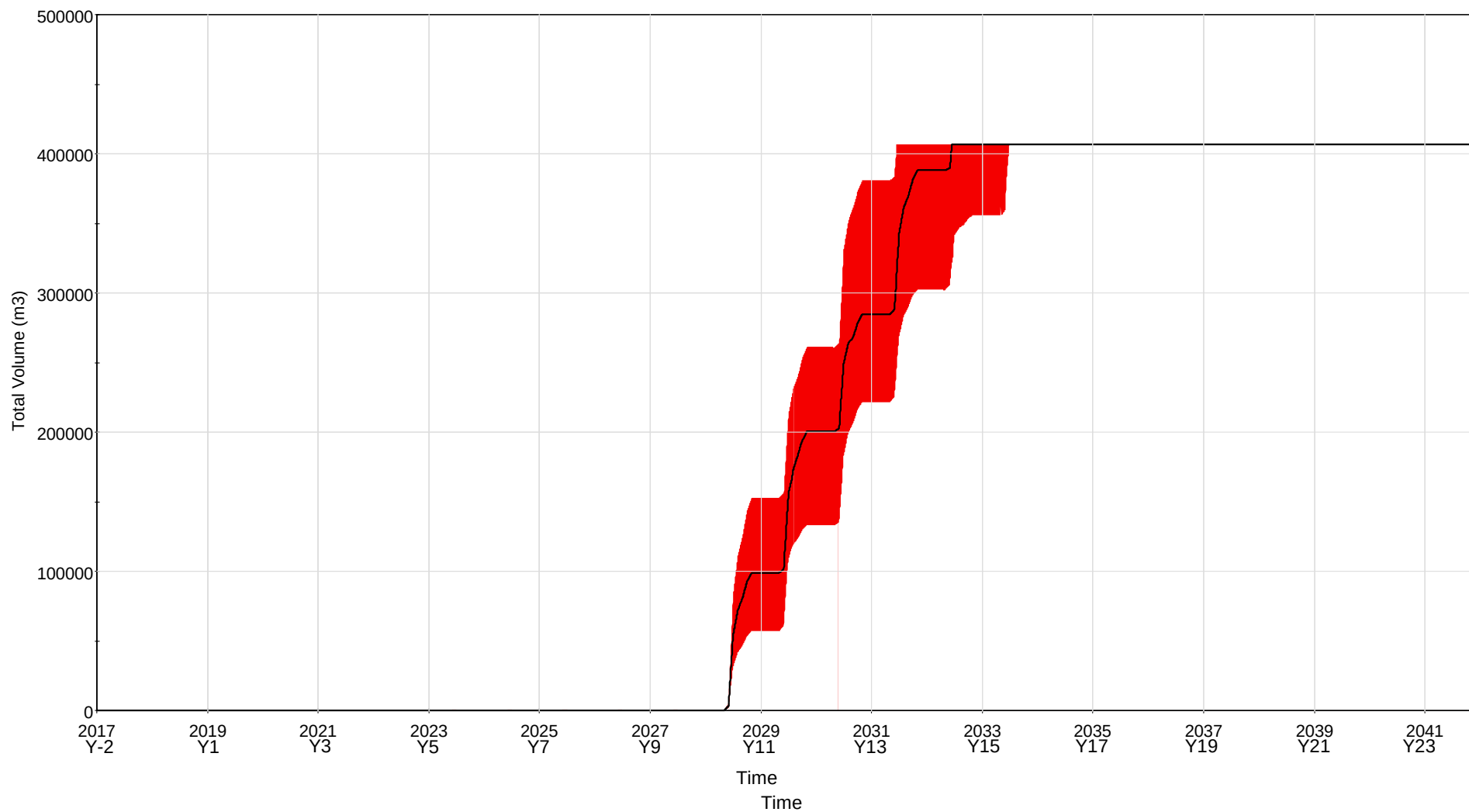
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Back River Project

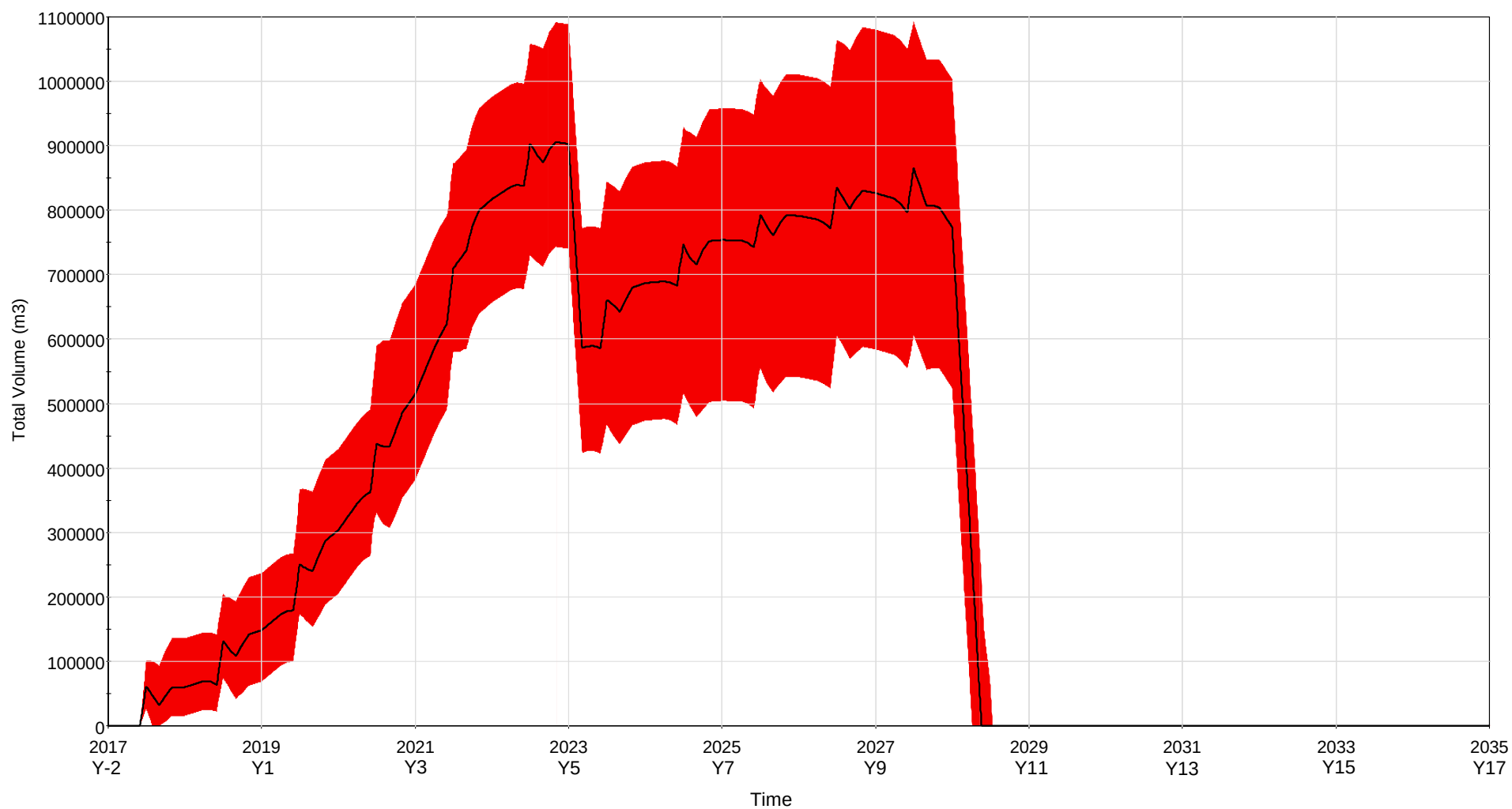
Date:
September 2015

Approved:
SPB

Figure: **6-5**



Statistics for Echo_Reservoir
 5%..95% 50%



Statistics for W_Brine_Pond
 5%..95% 50%



Job No: 1CS020.00
 Filename: WaterBalanceFigures.pptx



Back River Project

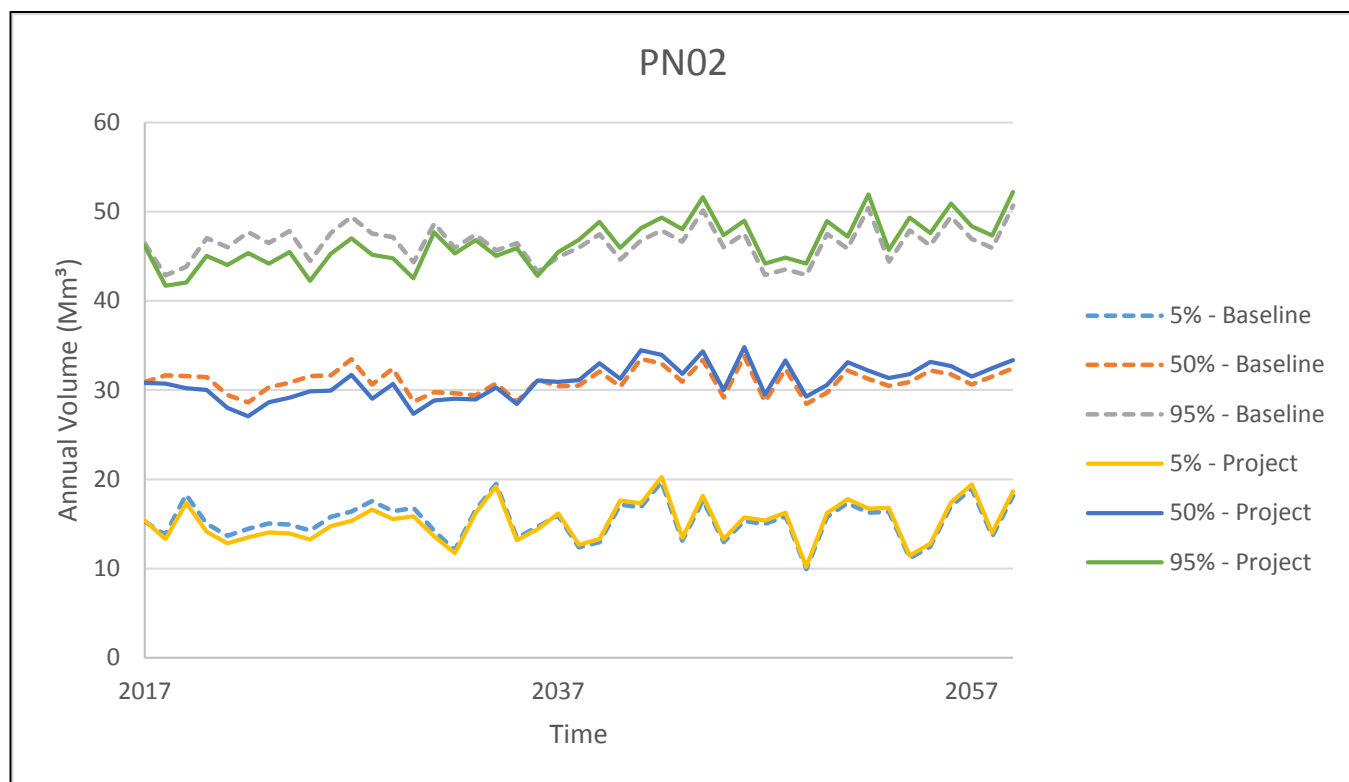
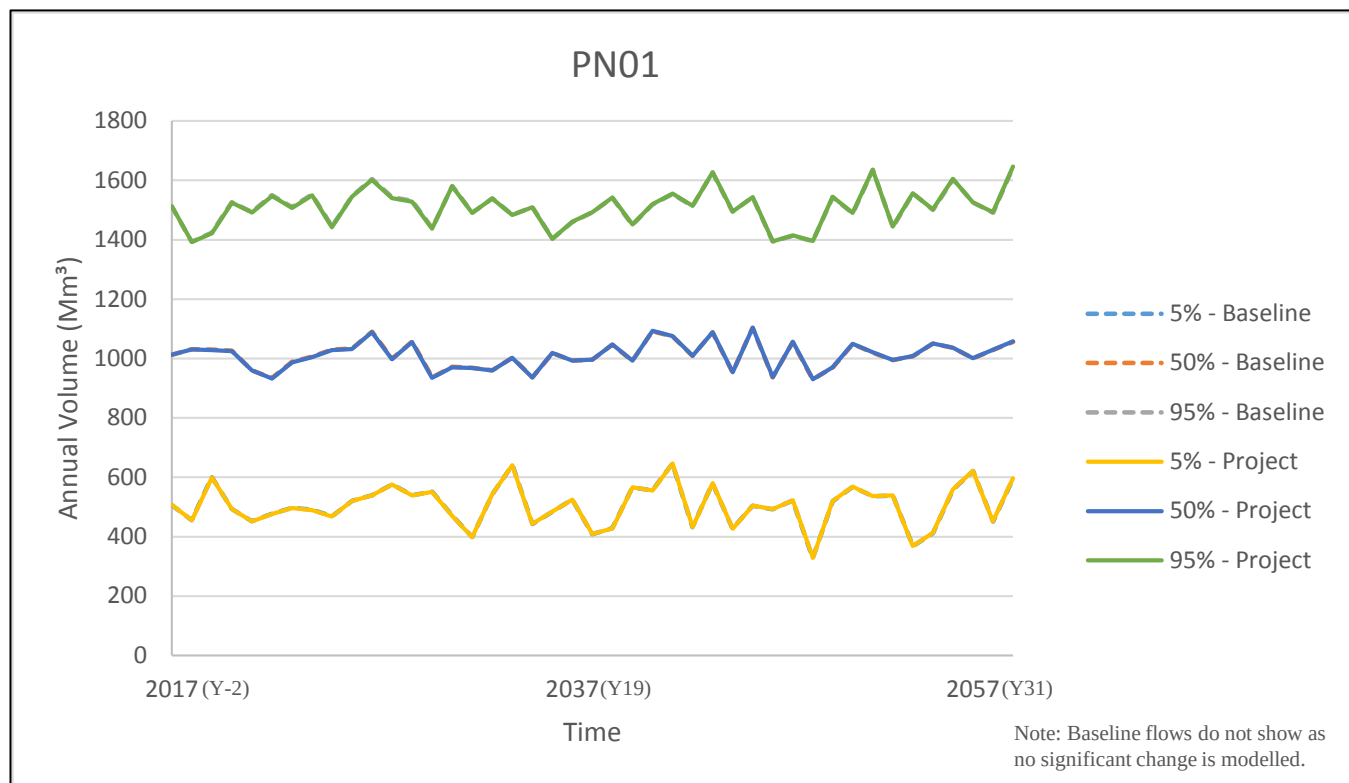
Water and Load Balance Report

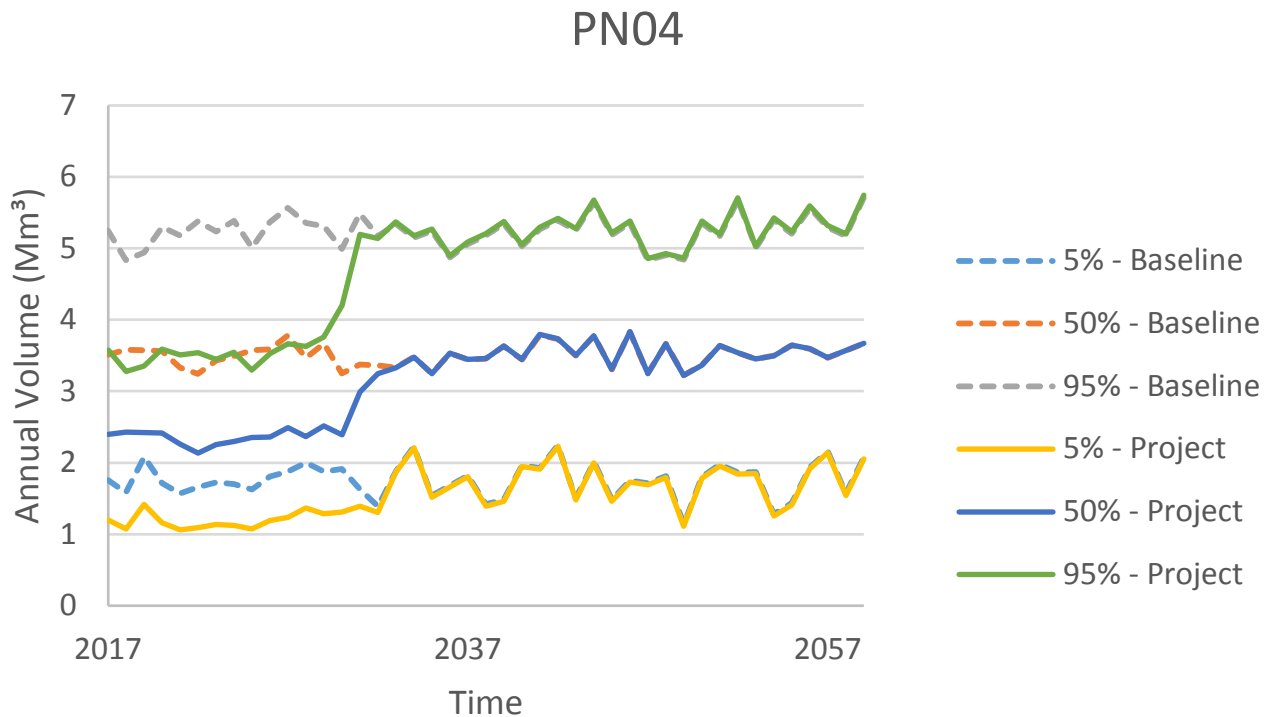
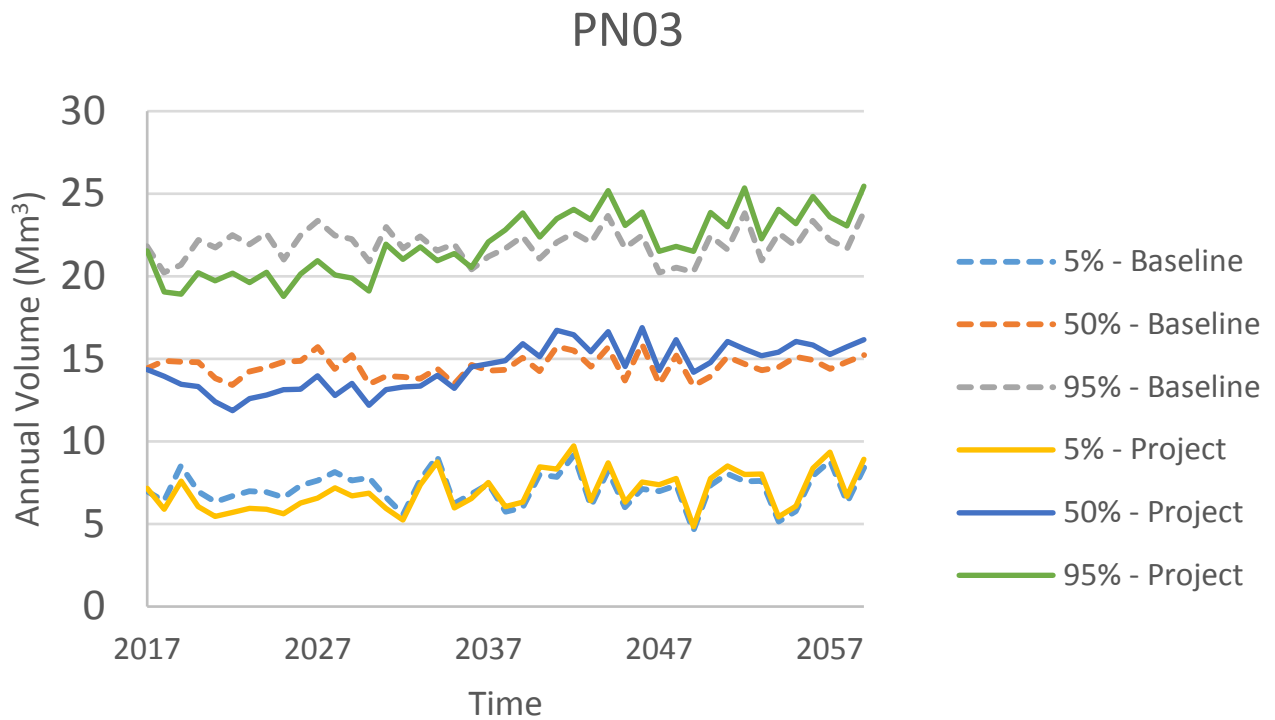
Saline Water Pond Storage Volume

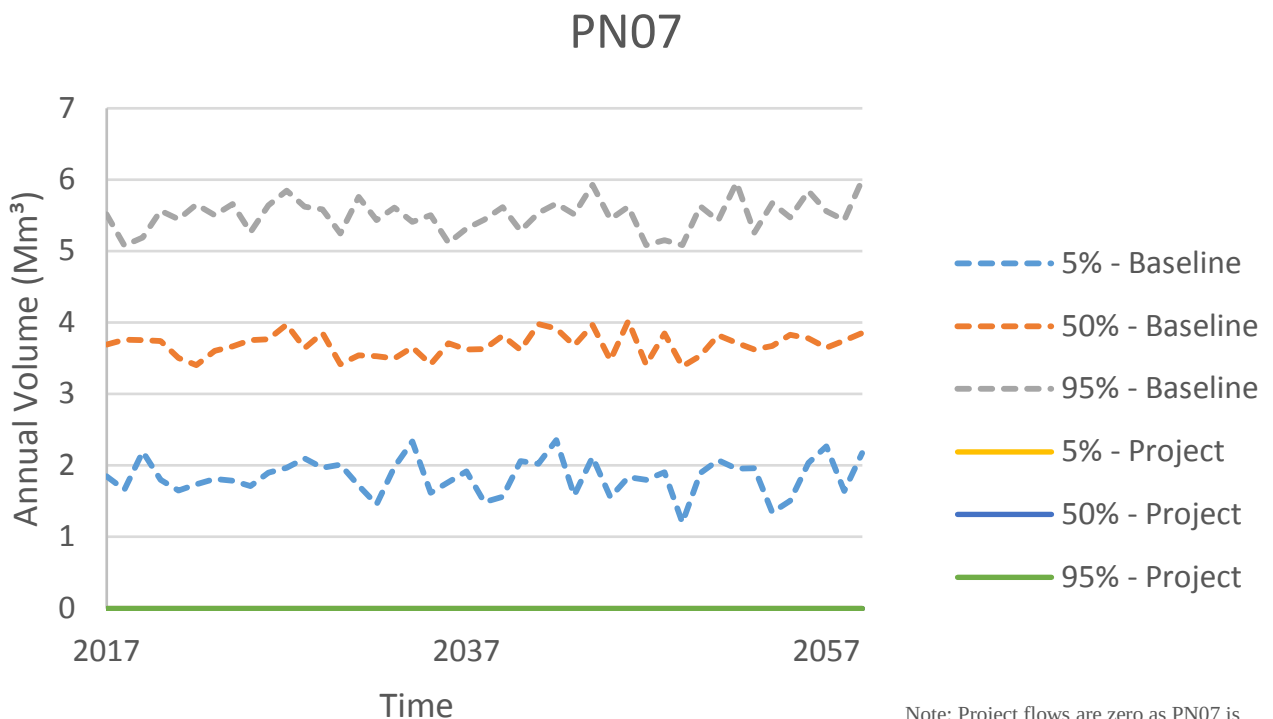
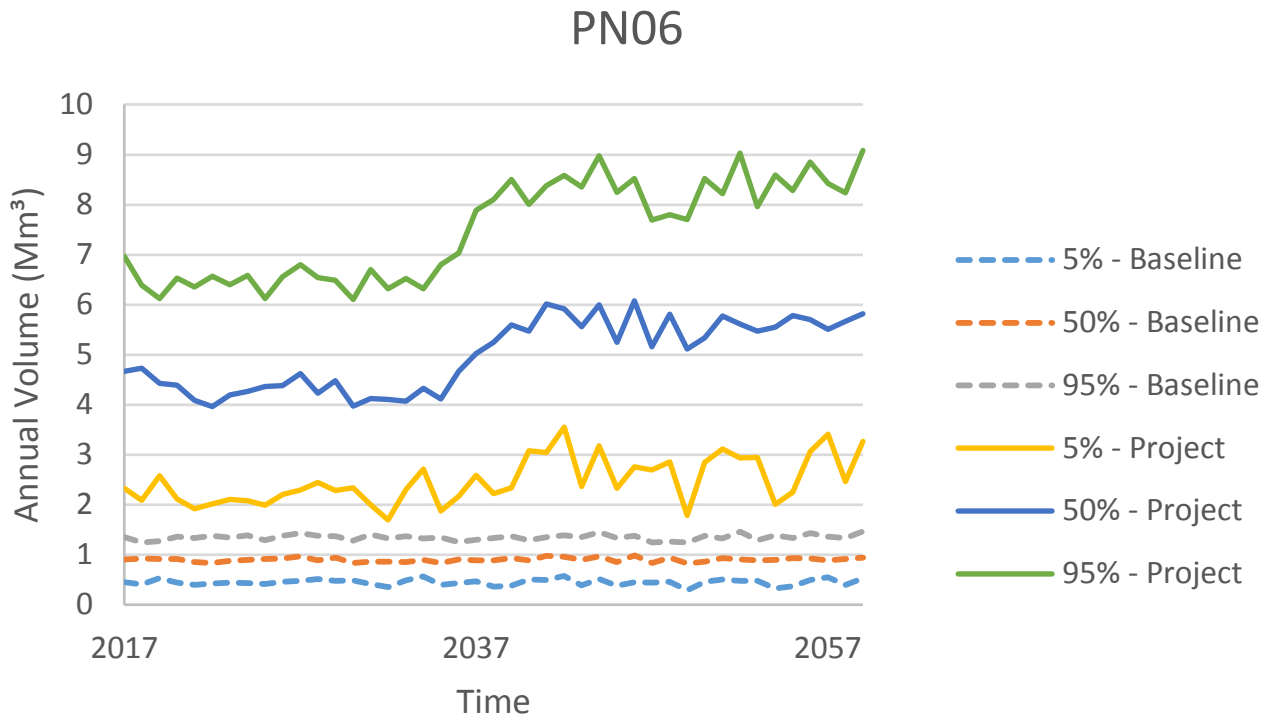
Date: September 2015

Approved: SPB

Figure: 6-7

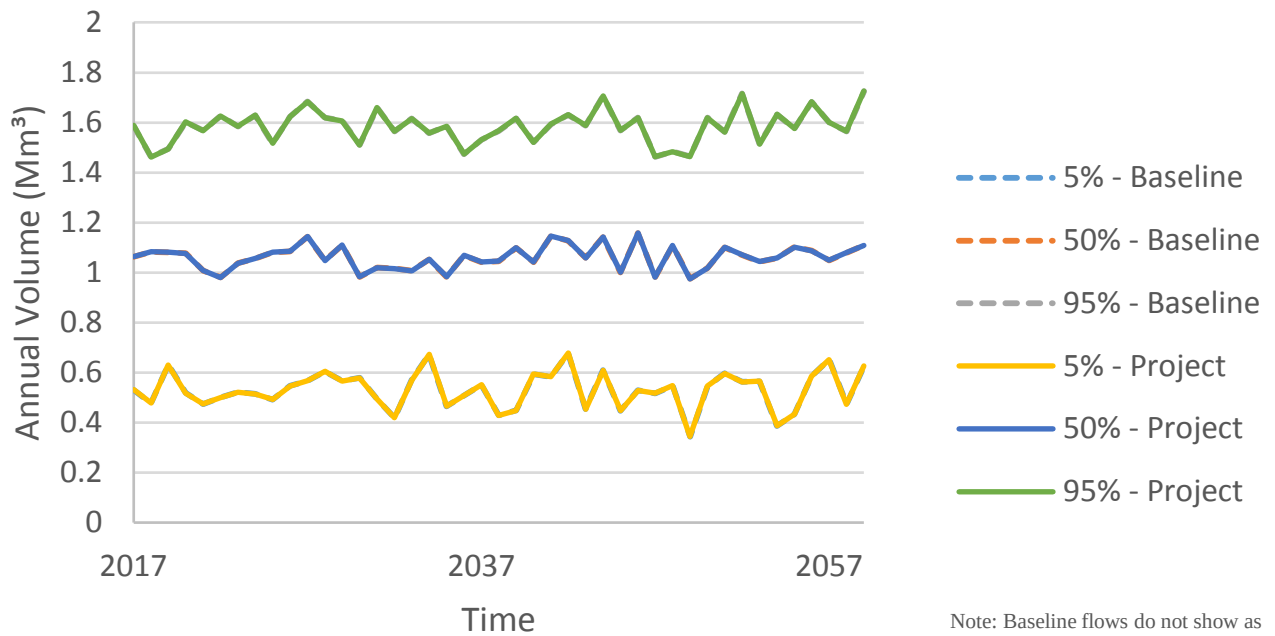




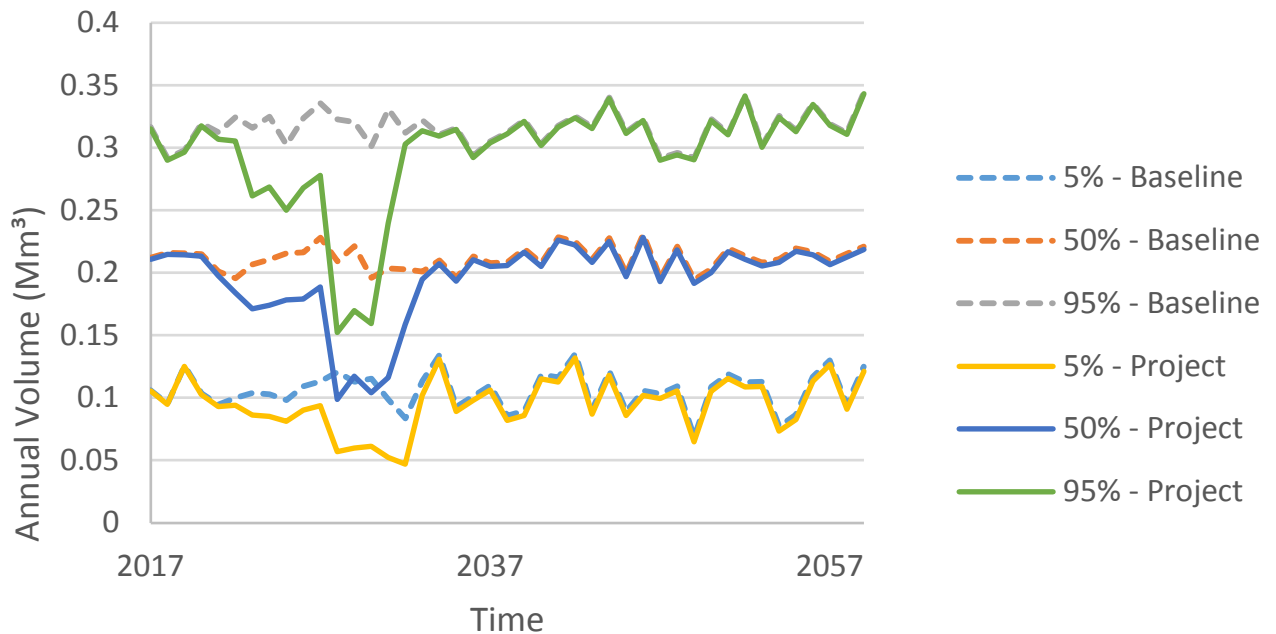


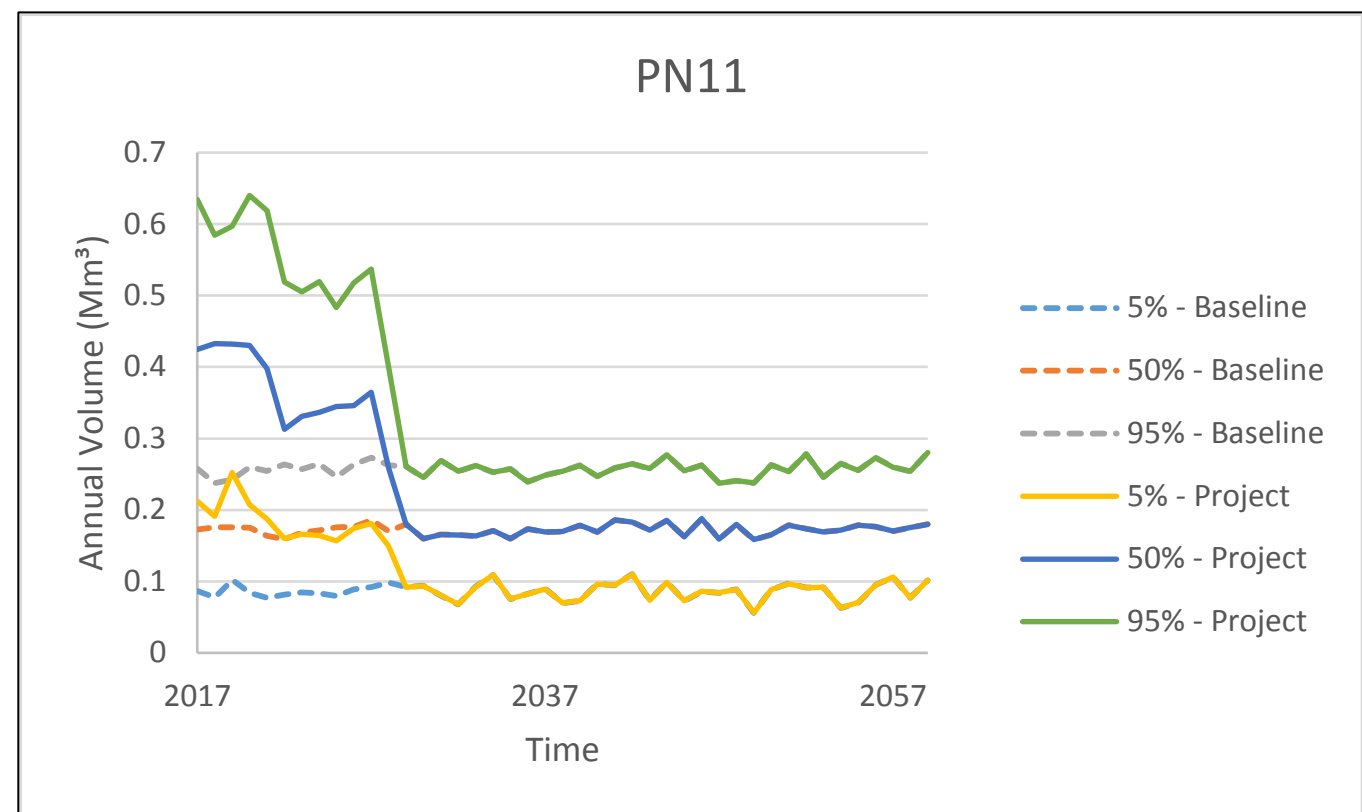
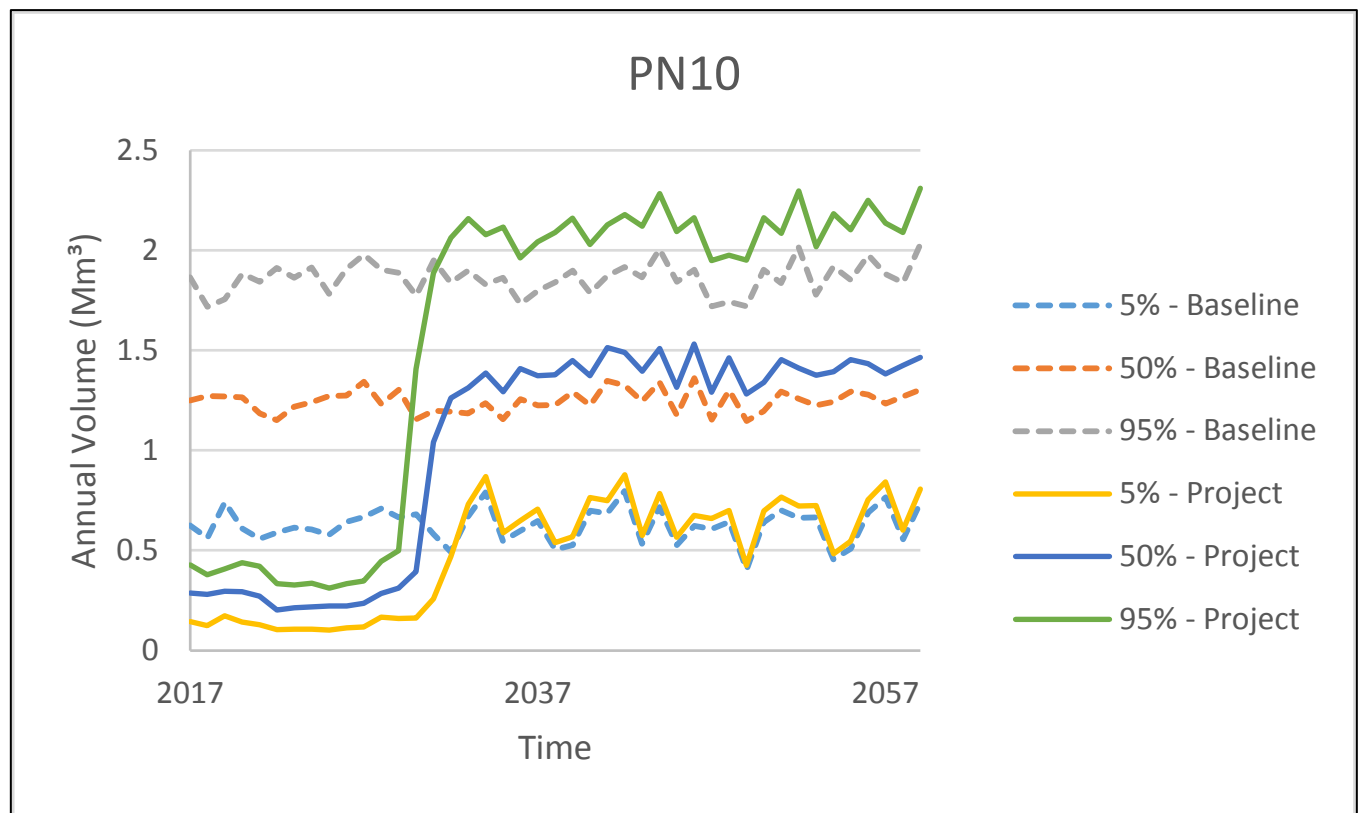
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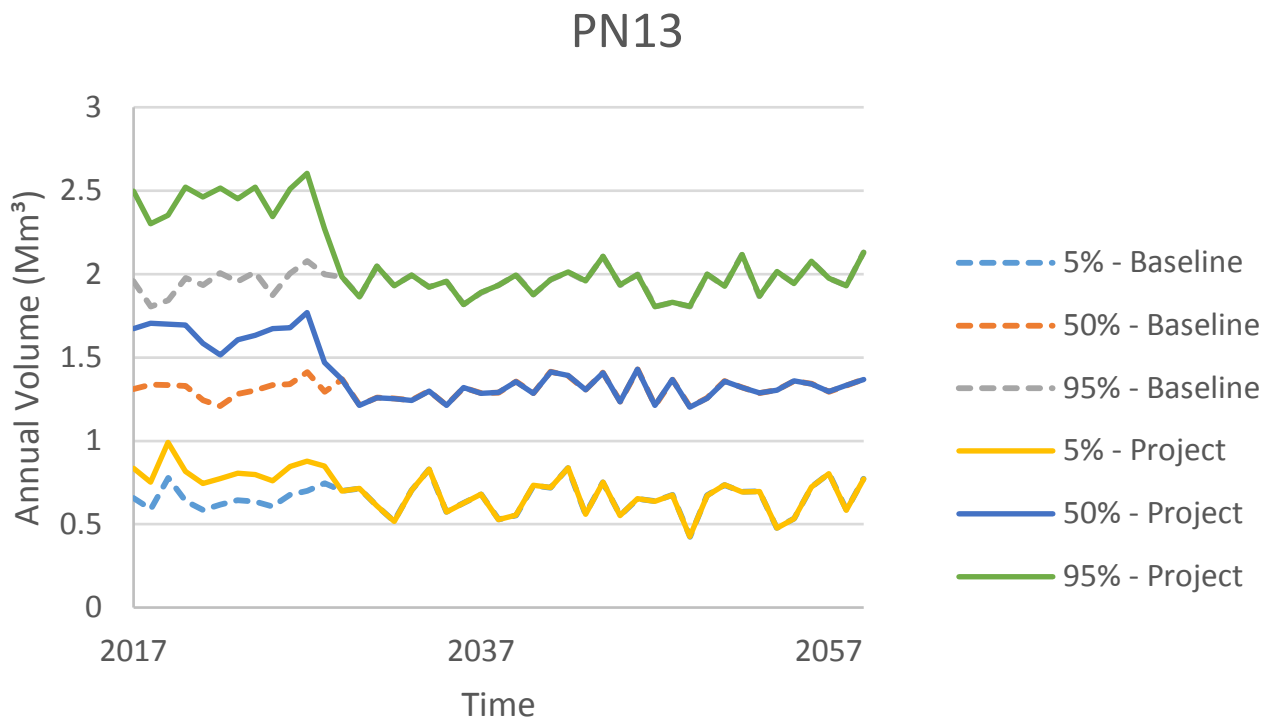
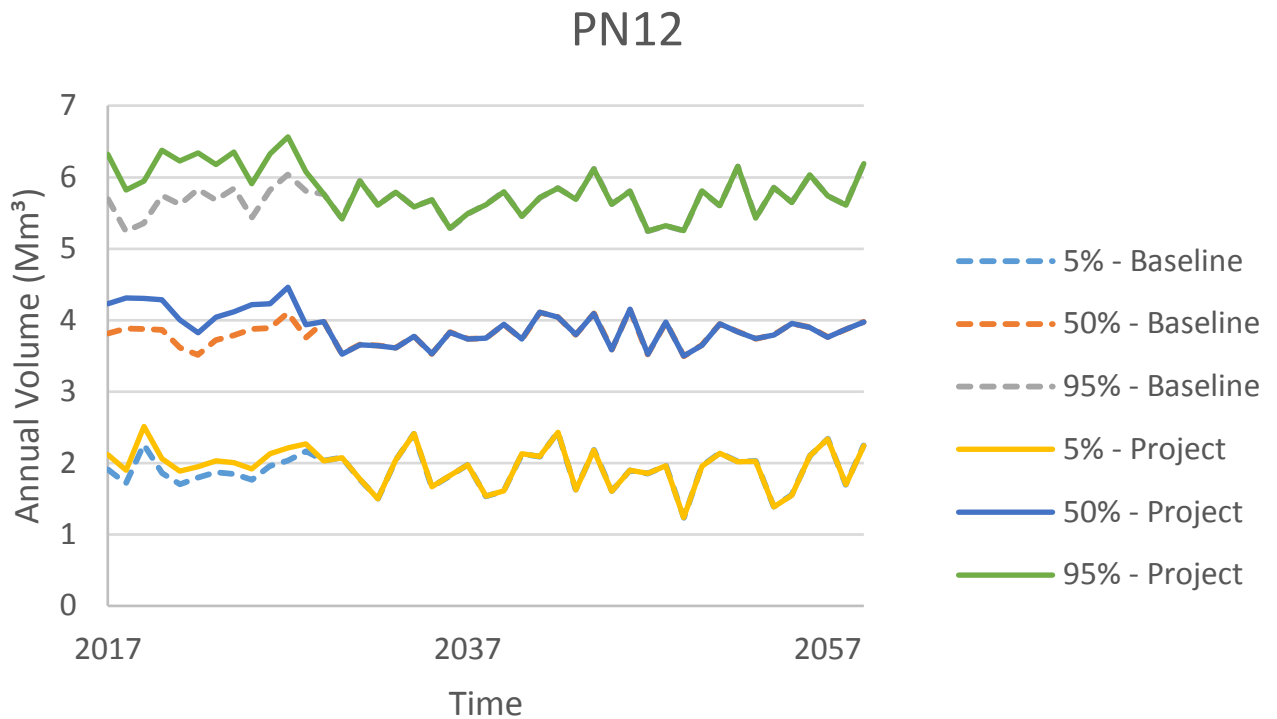
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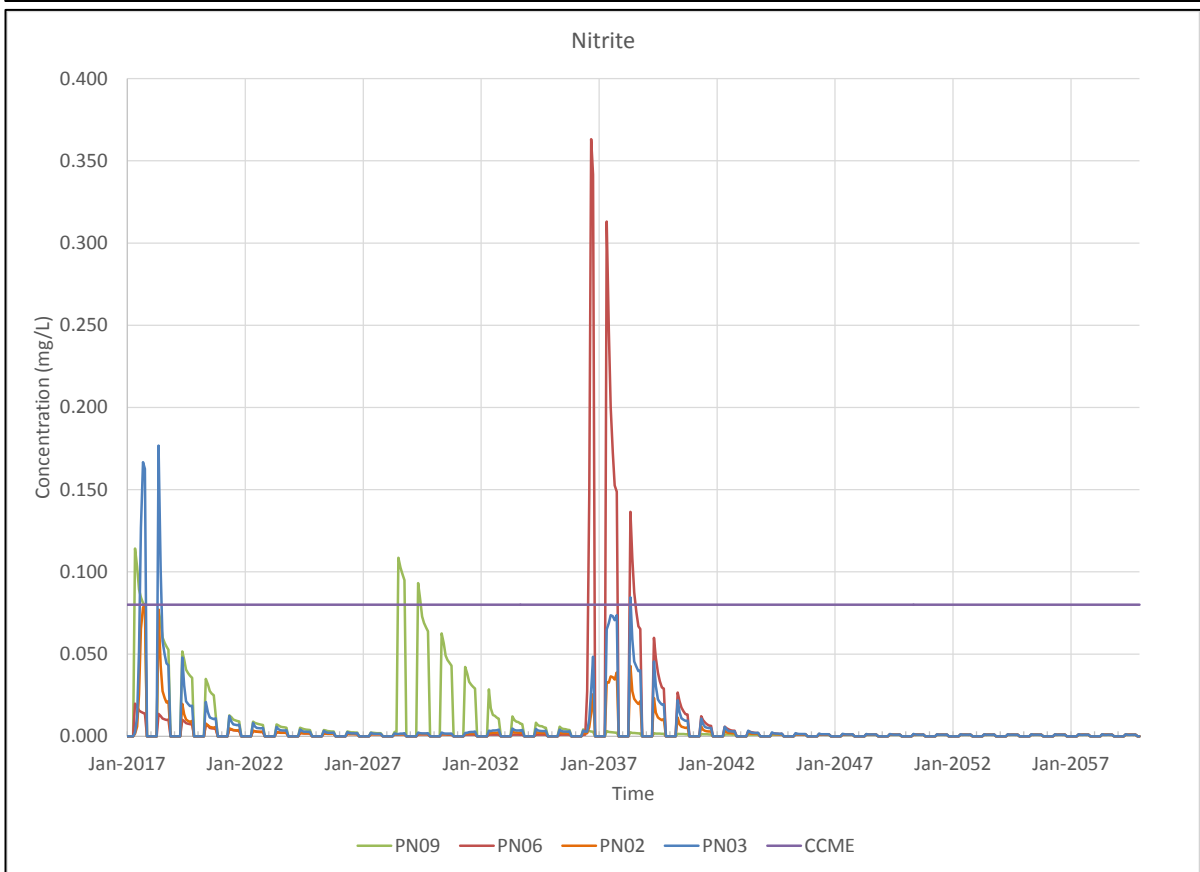
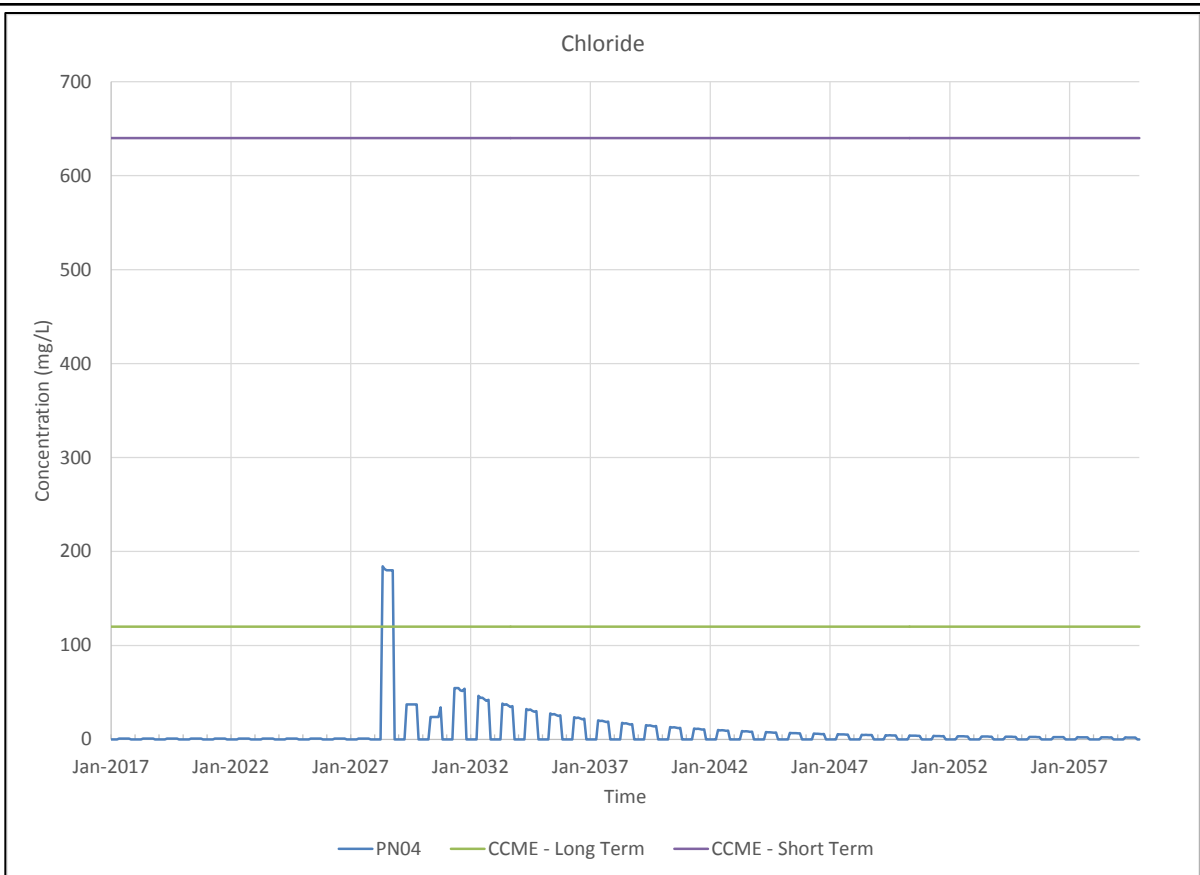


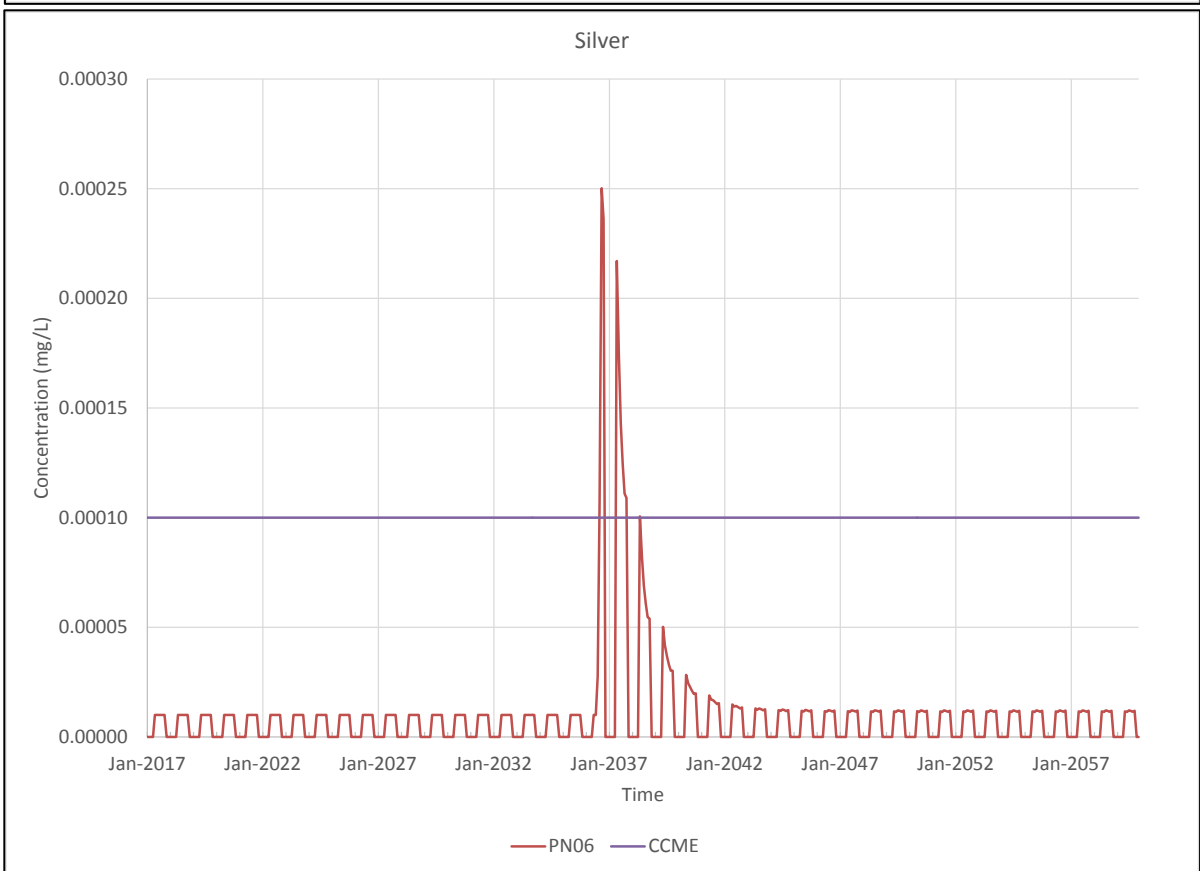
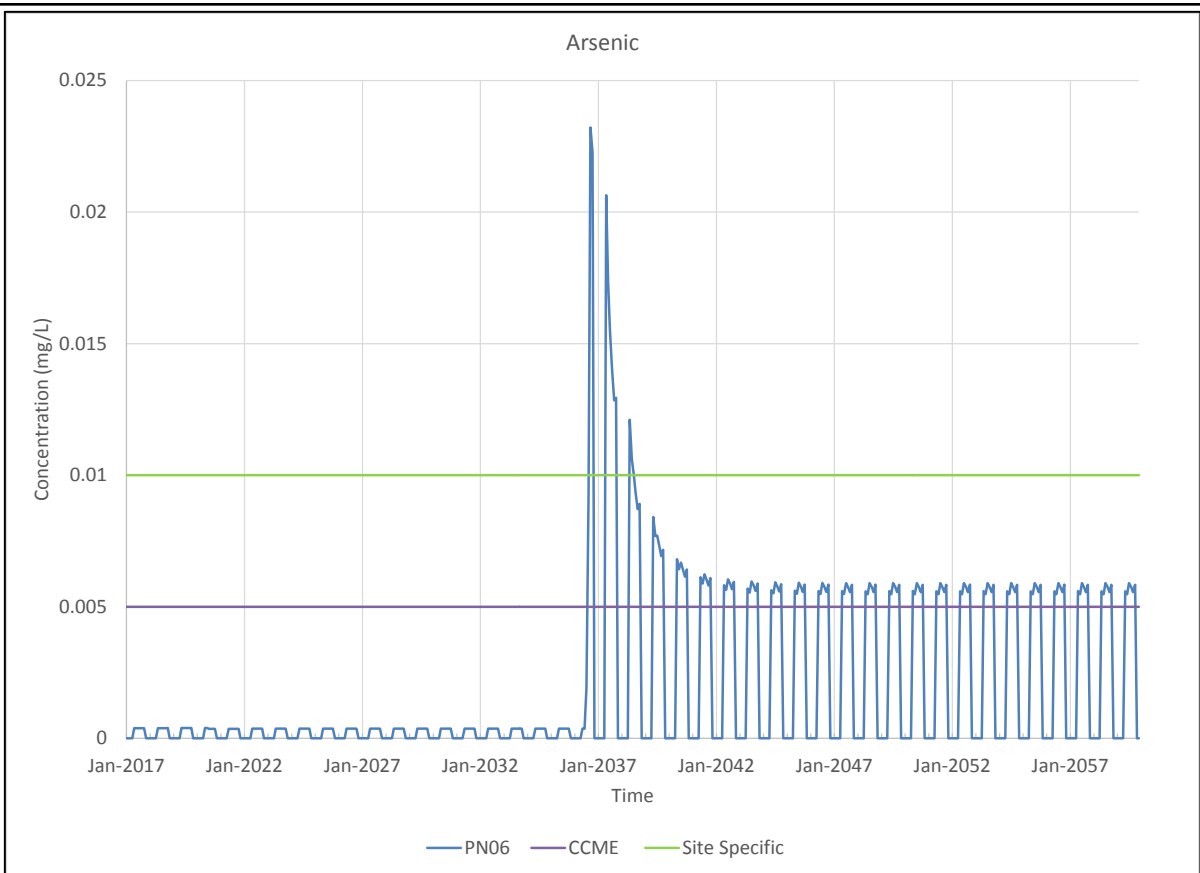
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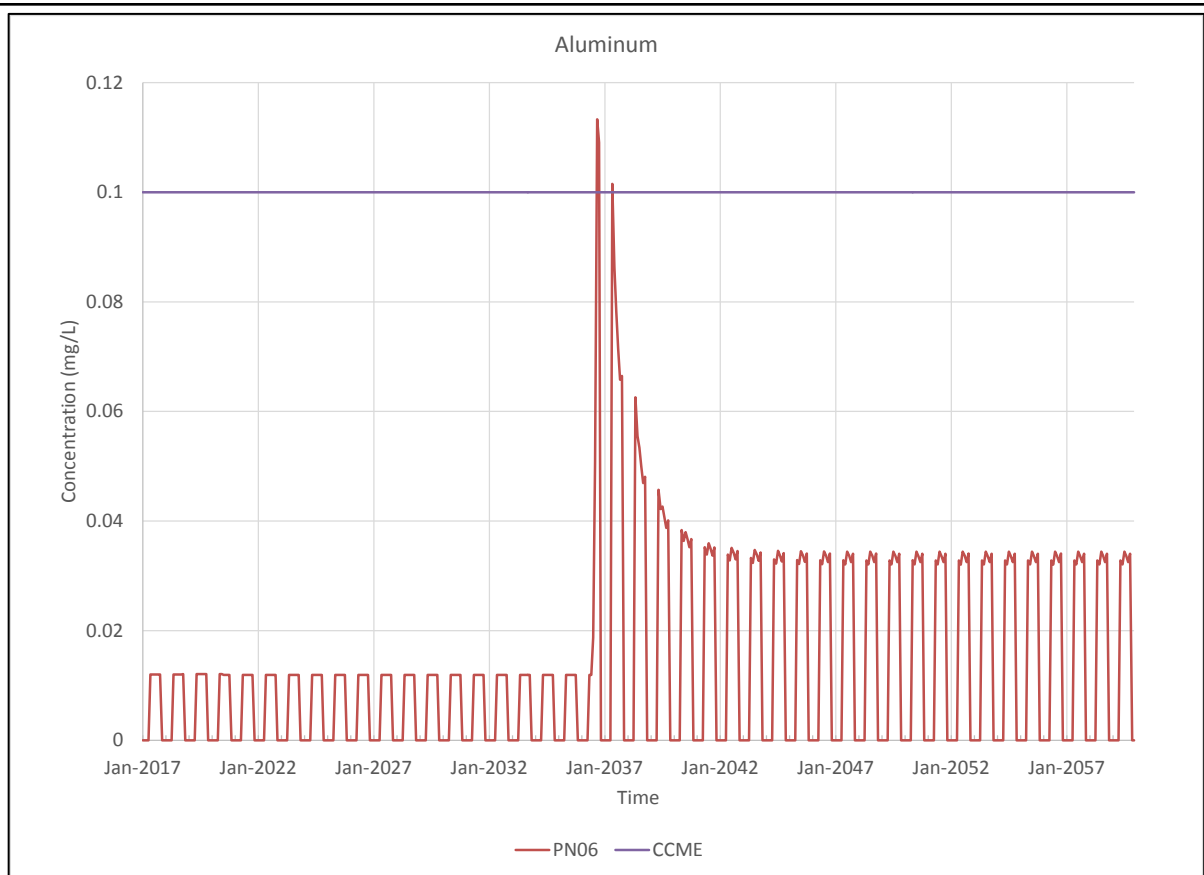




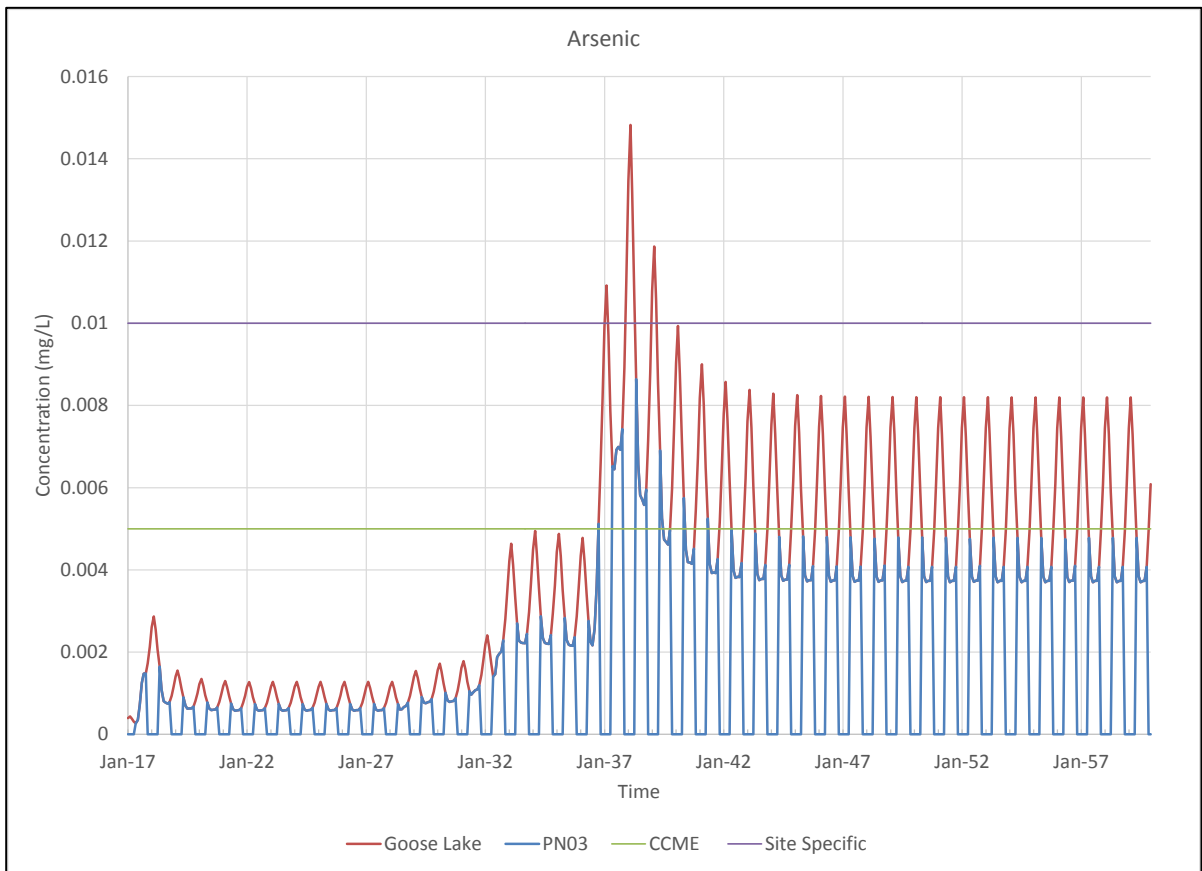




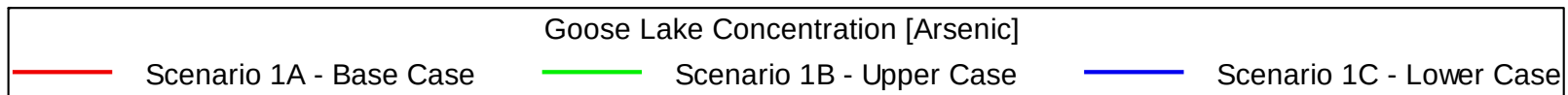
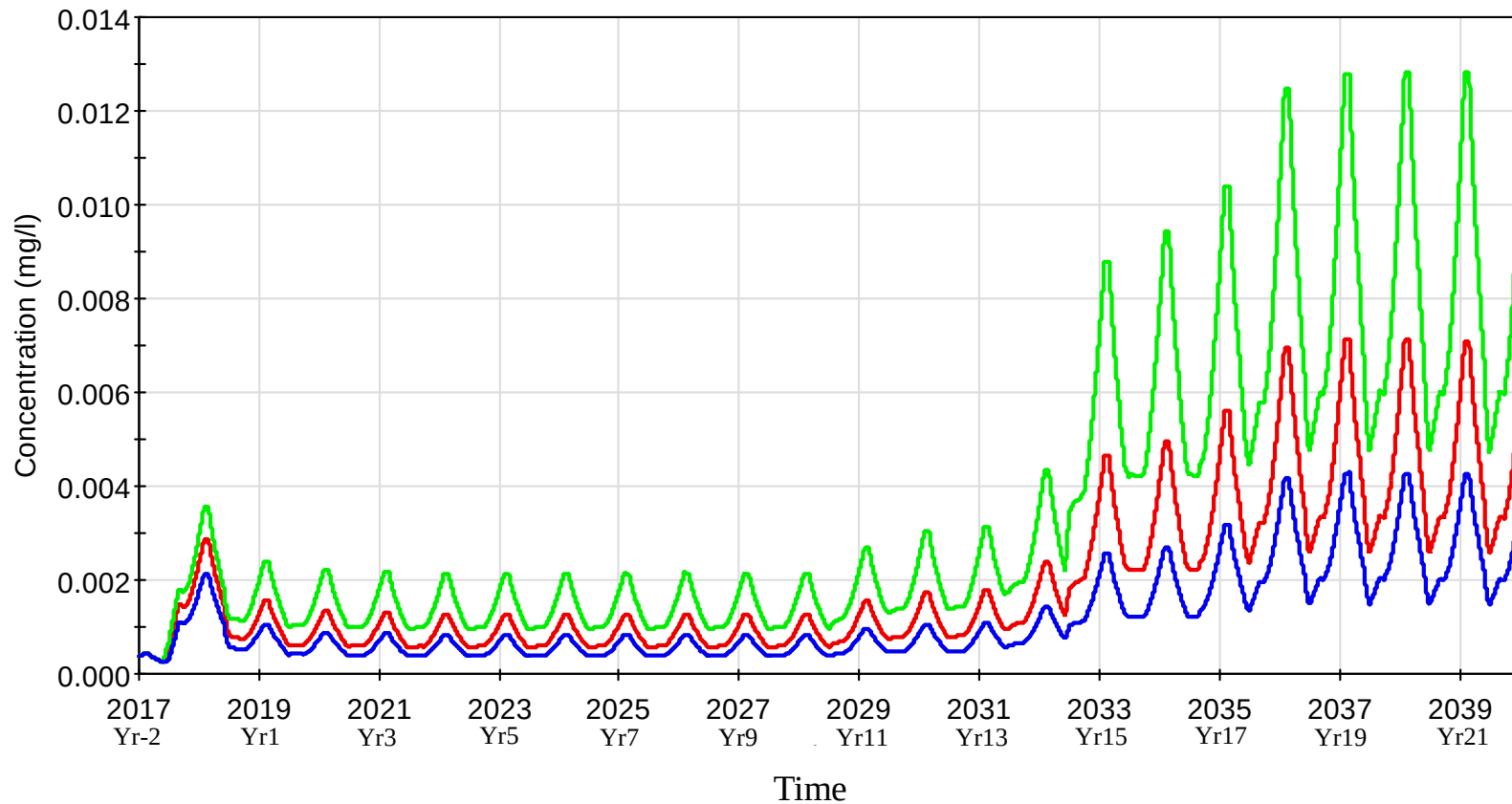




		Water and Load Balance Report		
		Prediction Node Results – Aluminum and Iron		
Job No: 1CS020.008 Filename: Water Quality Figures.pptx	Back River Project	Date: September 2015	Approved: SPB	Figure: 7-3



Goose Lake Arsenic Concentration



Source: \\Van-svr0.van.na.srk.ad\projects\01_SITES\Back River\1CS020.008_FEIS\700_Water_Mgt_System_Update\Sensitivity Analysis\FEIS_Goose_Rev17H_SensitivityAnalysis_spb_kpw.gsm



Job No: 1CS020.00
Filename: WaterBalanceFigures.pptx



Back River Project

Water and Load Balance Report

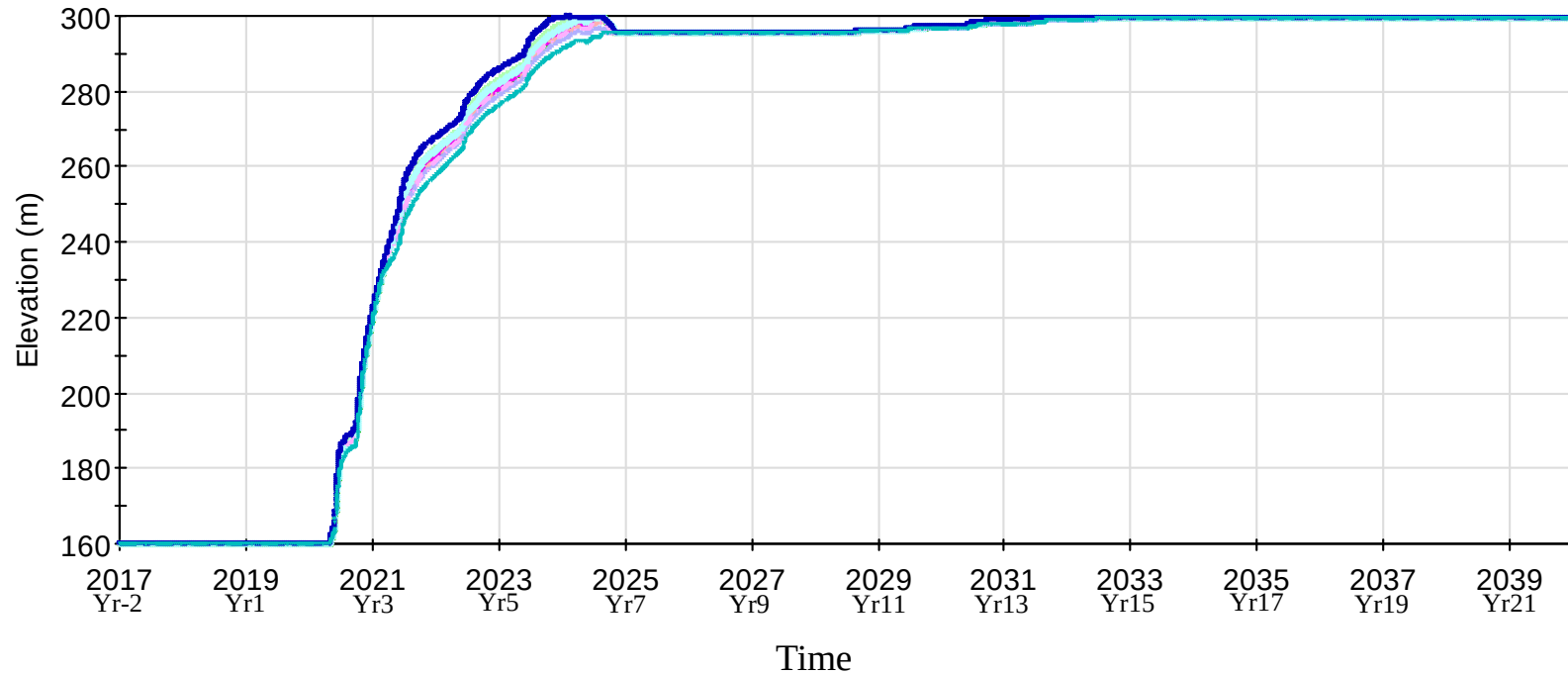
Arsenic Concentrations in Goose Lake

Date:
September 2015

Approved:
SPB

Figure: **9-1**

Umwelt Elevations



Umwelt_TF_Water_Elev

- | | |
|---|---|
| Scenario 2A - Base Case | Scenario 2B - Upper Case Roads/UG Pads |
| Scenario 2C - Lower Case Roads/UG Pads | Scenario 2D - Upper Case Pit Wall |
| Scenario 2E - Lower Case Pit Wall | Scenario 2F - Upper Case Waste Rock |
| Scenario 2G - Lower Case Waste Rock | Scenario 2H - Upper Case Beach Tailings |
| Scenario 2I - Lower Case Beach Tailings | Scenario 2J - Upper Case All Features |
| Scenario 2K - Lower Case All Features | |

Source: \\Van-svr0.van.na.srk.ad\projects\01_SITES\Back River\1CS020.008_FEIS\700_Water_Mgt_System_Update\Sensitivity Analysis\FEIS_Goose_Rev17H_SensitivityAnalysis_spb_kpw.gsm



Job No: 1CS020.00
Filename: WaterBalanceFigures.pptx



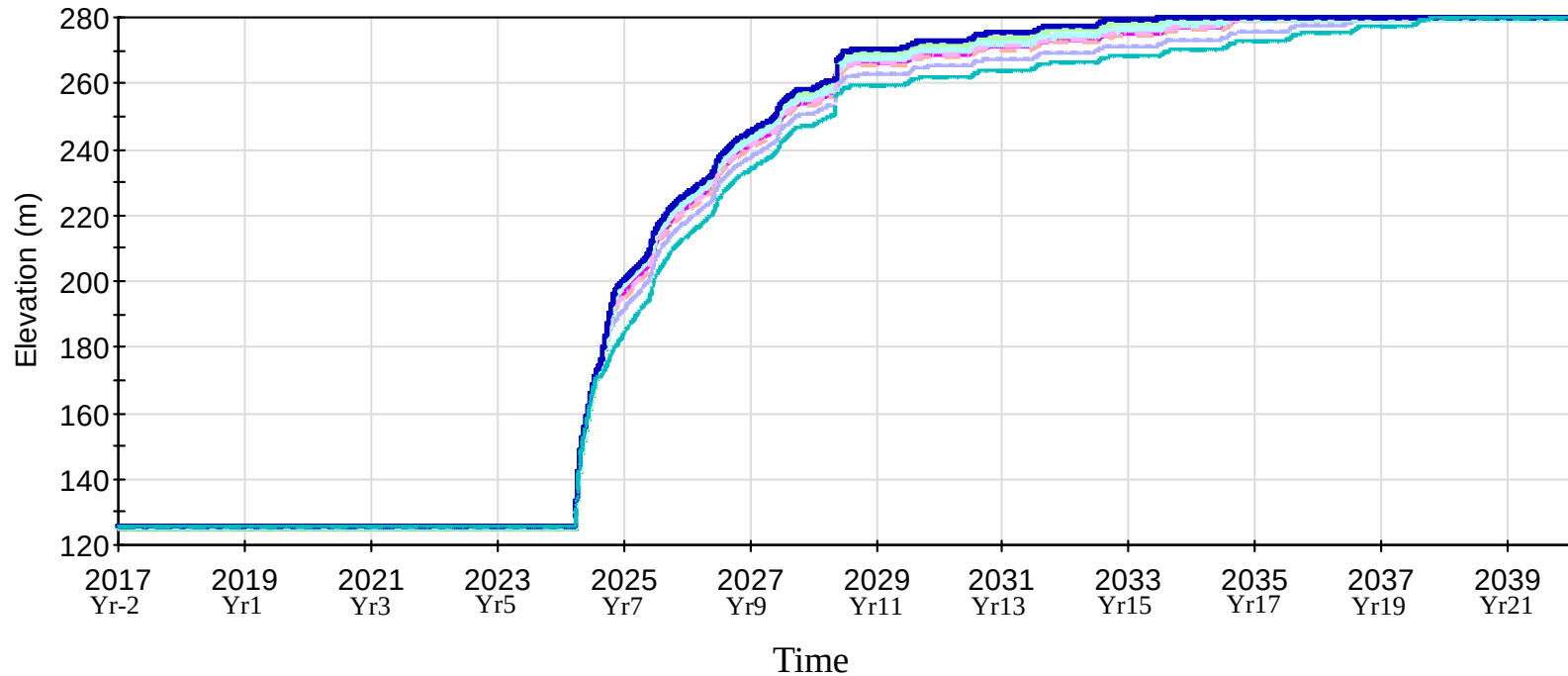
Back River Project

Water and Load Balance Report

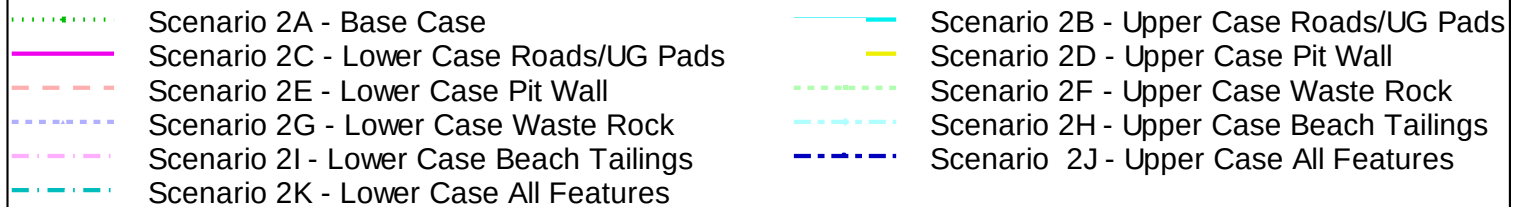
Predicted Elevations – Umwelt TF Sensitivity

Date: September 2015	Approved: SPB	Figure: 9-2
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Goose Elevations



Goose_TF_Water_Elev



Source: \\Van-svr0.van.na.srk.ad\projects\01_SITES\Back River\1CS020.008_FEIS\700_Water_Mgt_System_Update\Sensitivity Analysis\FEIS_Goose_Rev17H_SensitivityAnalysis_spb_kpw.gsm



Job No: 1CS020.00
Filename: WaterBalanceFigures.pptx



Back River Project

Water and Load Balance Report

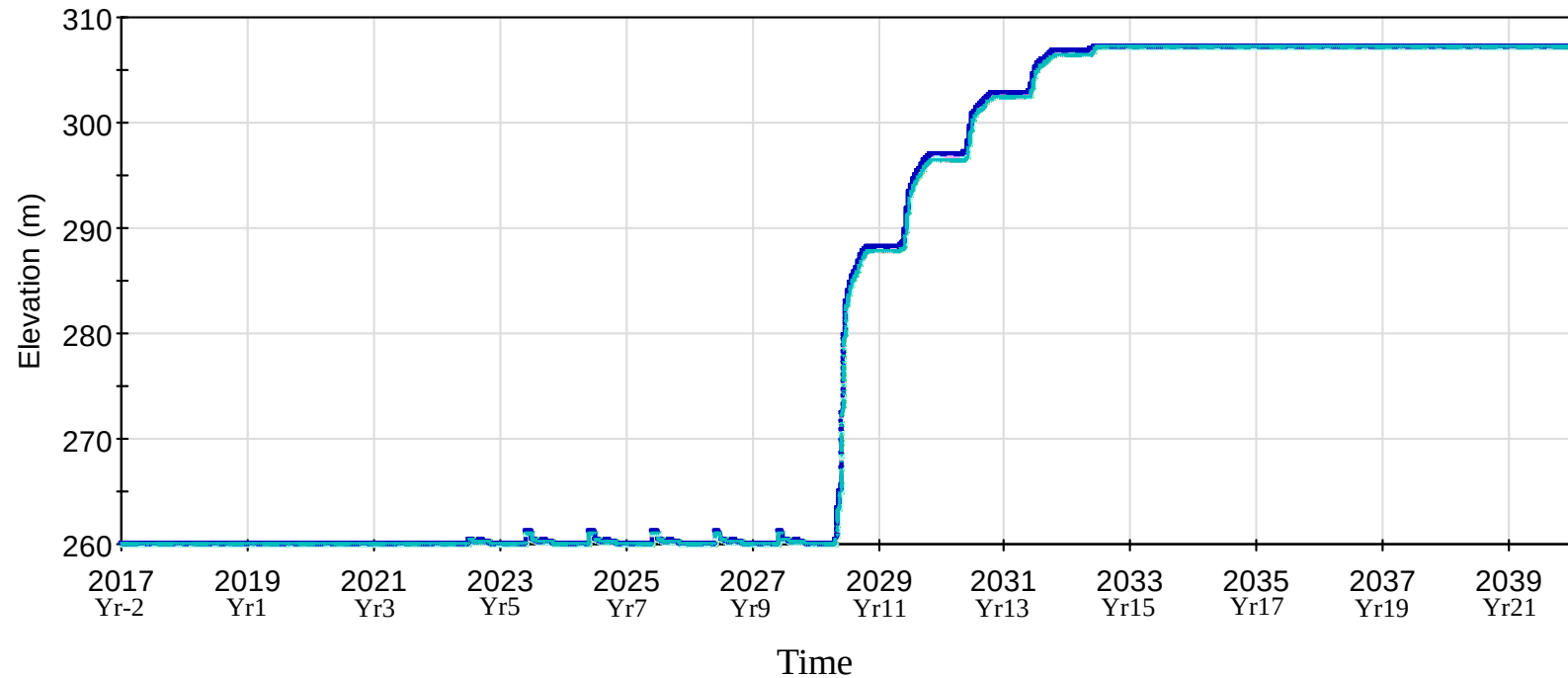
Predicted Elevations – Goose TF Sensitivity

Date:
September 2015

Approved:
SPB

Figure: **9-3**

Echo Elevations



Echo_Pit_Water_Elev

Scenario 2A - Base Case	Scenario 2B - Upper Case Roads/UG Pads
Scenario 2C - Lower Case Roads/UG Pads	Scenario 2D - Upper Case Pit Wall
Scenario 2E - Lower Case Pit Wall	Scenario 2F - Upper Case Waste Rock
Scenario 2G - Lower Case Waste Rock	Scenario 2H - Upper Case Beach Tailings
Scenario 2I - Lower Case Beach Tailings	Scenario 2J - Upper Case All Features
Scenario 2K - Lower Case All Features	

Source: \\Van-svr0.van.na.srk.ad\projects\01_SITES\Back River\1CS020.008_FEIS\700_Water_Mgt_System_Update\Sensitivity Analysis\FEIS_Goose_Rev17H_SensitivityAnalysis_spb_kpw.gsm



Water and Load Balance Report

Predicted Elevations – Echo Pit Sensitivity

Job No: 1CS020.00
Filename: WaterBalanceFigures.pptx

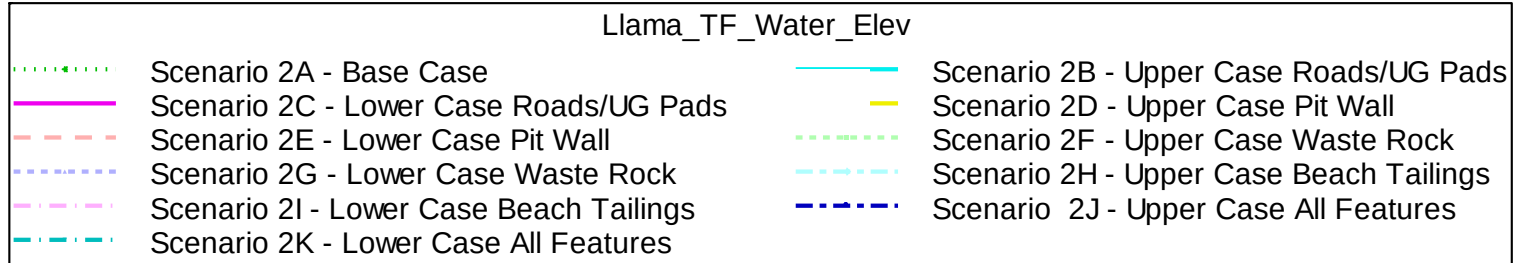
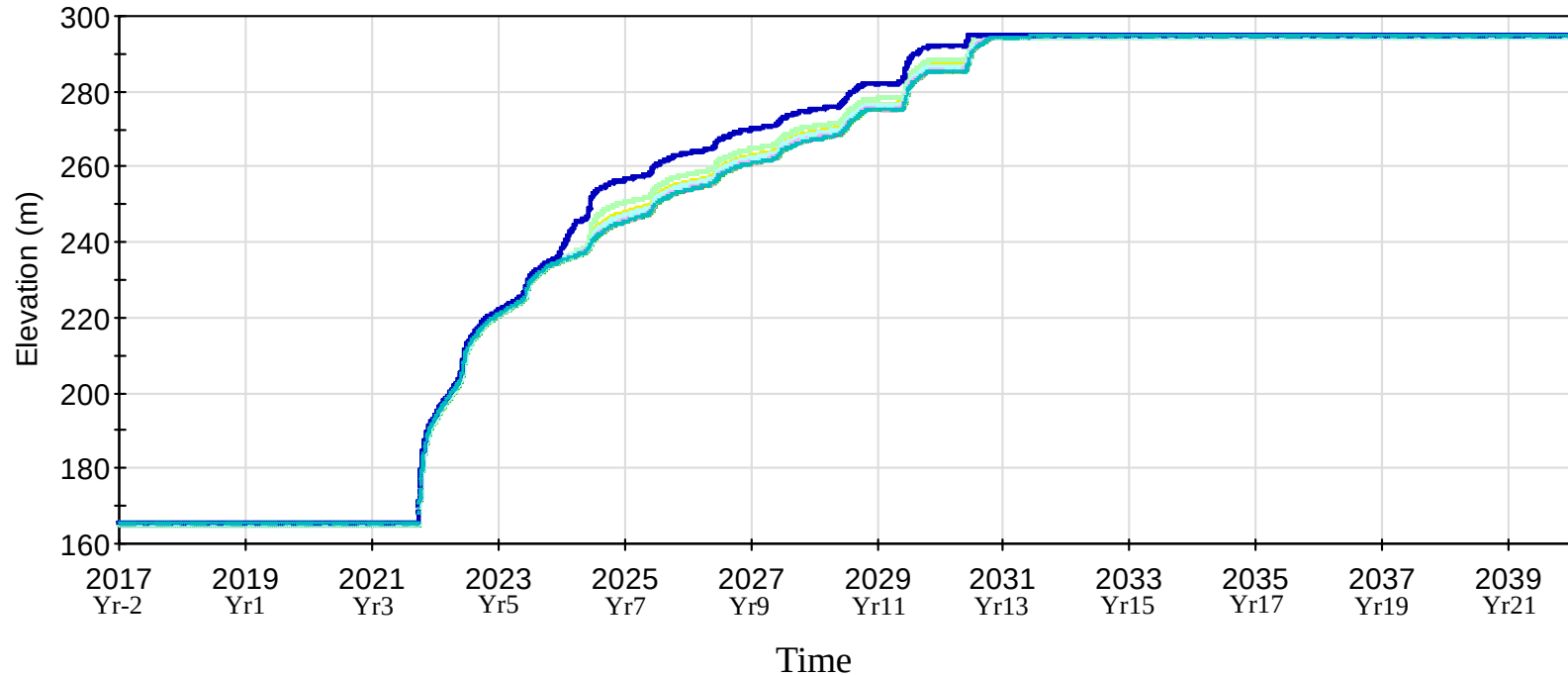
Back River Project

Date:
September 2015

Approved:
SPB

Figure: **9-4**

Llama Elevations



Source: \\Van-svr0.van.na.srk.ad\projects\01_SITES\Back River\1CS020.008_FEIS\700_Water_Mgt_System_Update\Sensitivity Analysis\FEIS_Goose_Rev17H_SensitivityAnalysis_spb_kpw.gsm



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Filename: WaterBalanceFigures.pptx



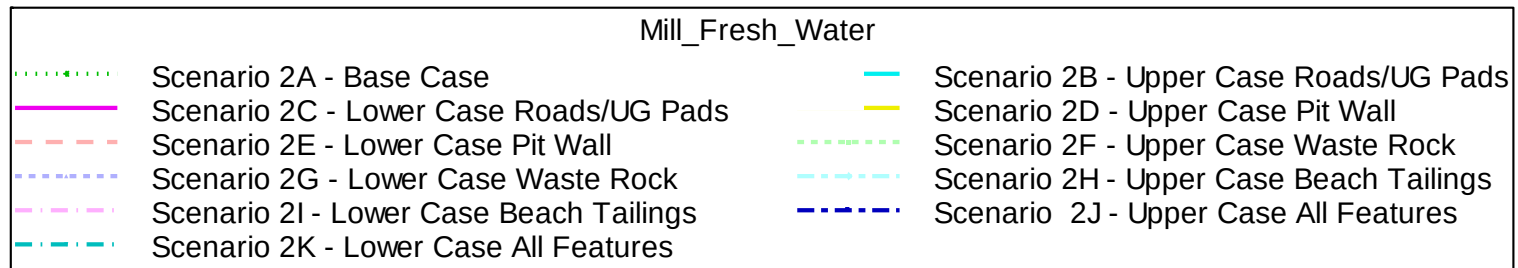
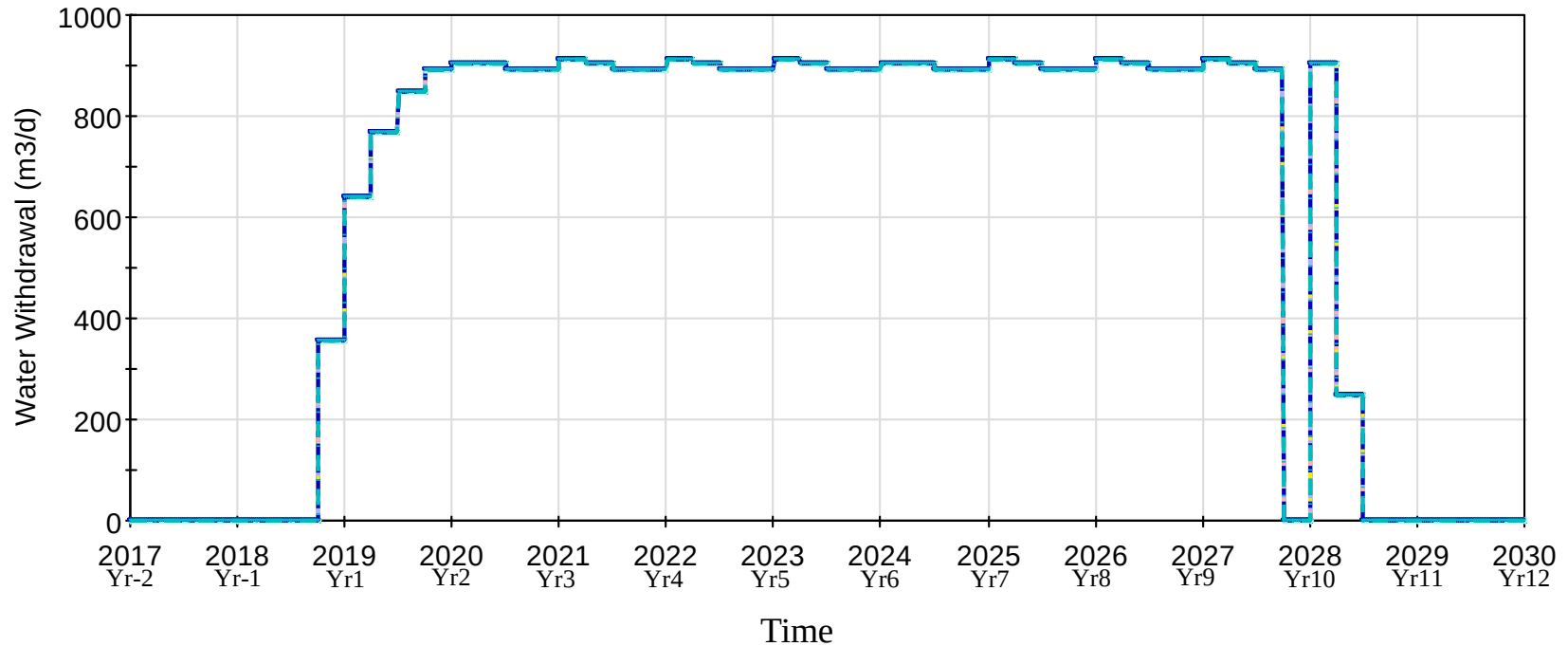
Back River Project

Water and Load Balance Report

Predicted Elevations – Llama Reservoir Sensitivity

Date: September 2015	Approved: SPB	Figure: 9-5
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Goose Lake Mill Water Withdrawal



Source: \\Van-svr0.van.na.srk.ad\projects\01_SITES\Back River\1CS020.008_FEIS\700_Water_Mgt_System_Update\Sensitivity_Analysis\FEIS_Goose_Rev17H_SensitivityAnalysis_spb_kpw.gsm



Job No: 1CS020.00
Filename: WaterBalanceFigures.pptx



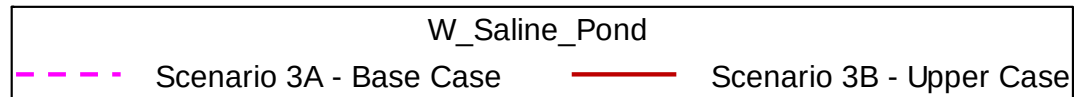
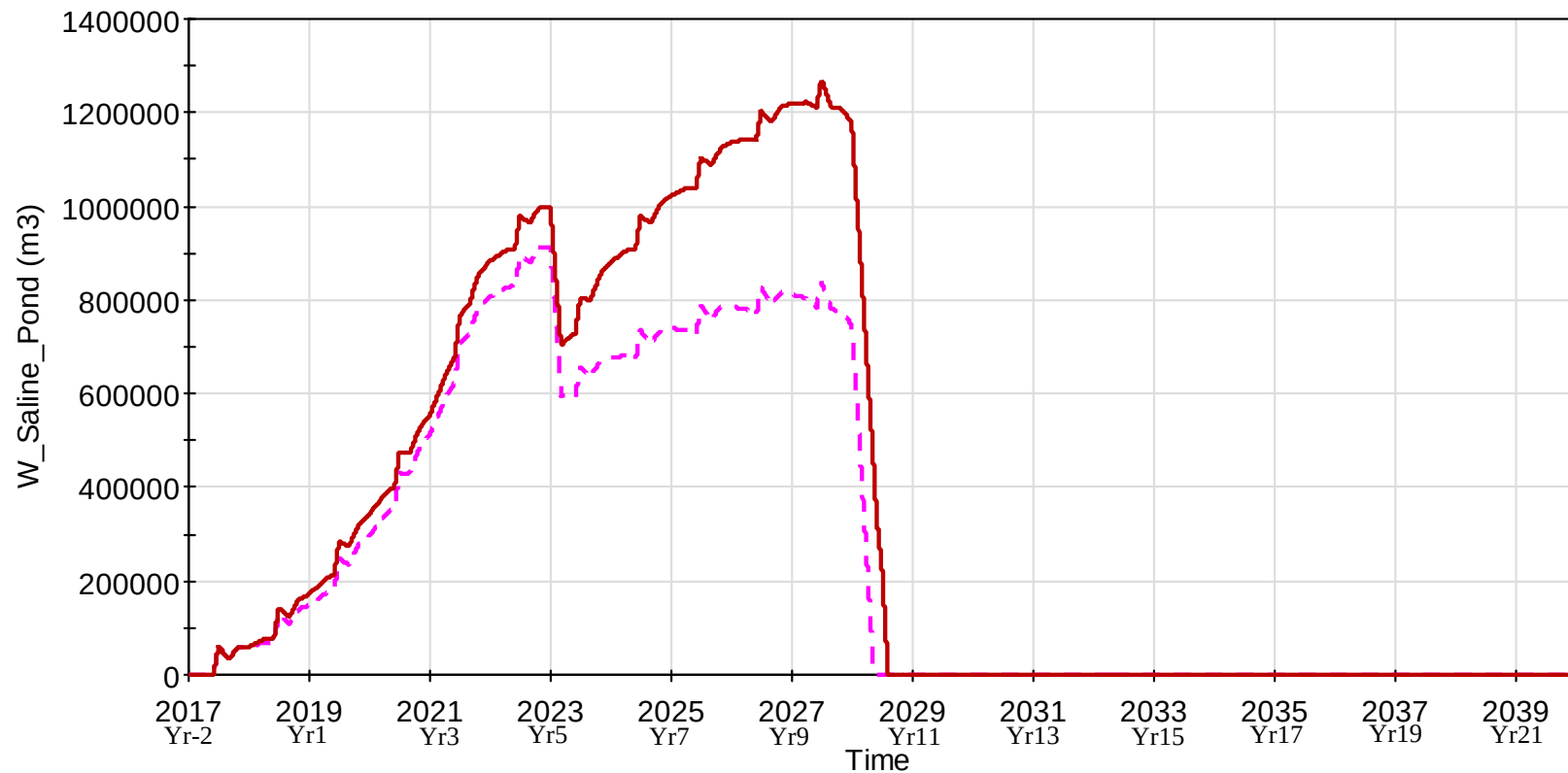
Back River Project

Water and Load Balance Report

Predicted Mill Water Withdrawals from Goose Lake

Date: September 2015	Approved: SPB	Figure: 9-6
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Saline Pond Volume



Water and Load Balance Report

Saline Water Pond Water Volumes - Sensitivity

Job No: 1CS020.00
Filename: WaterBalanceFigures.pptx

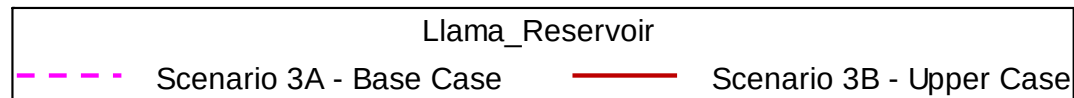
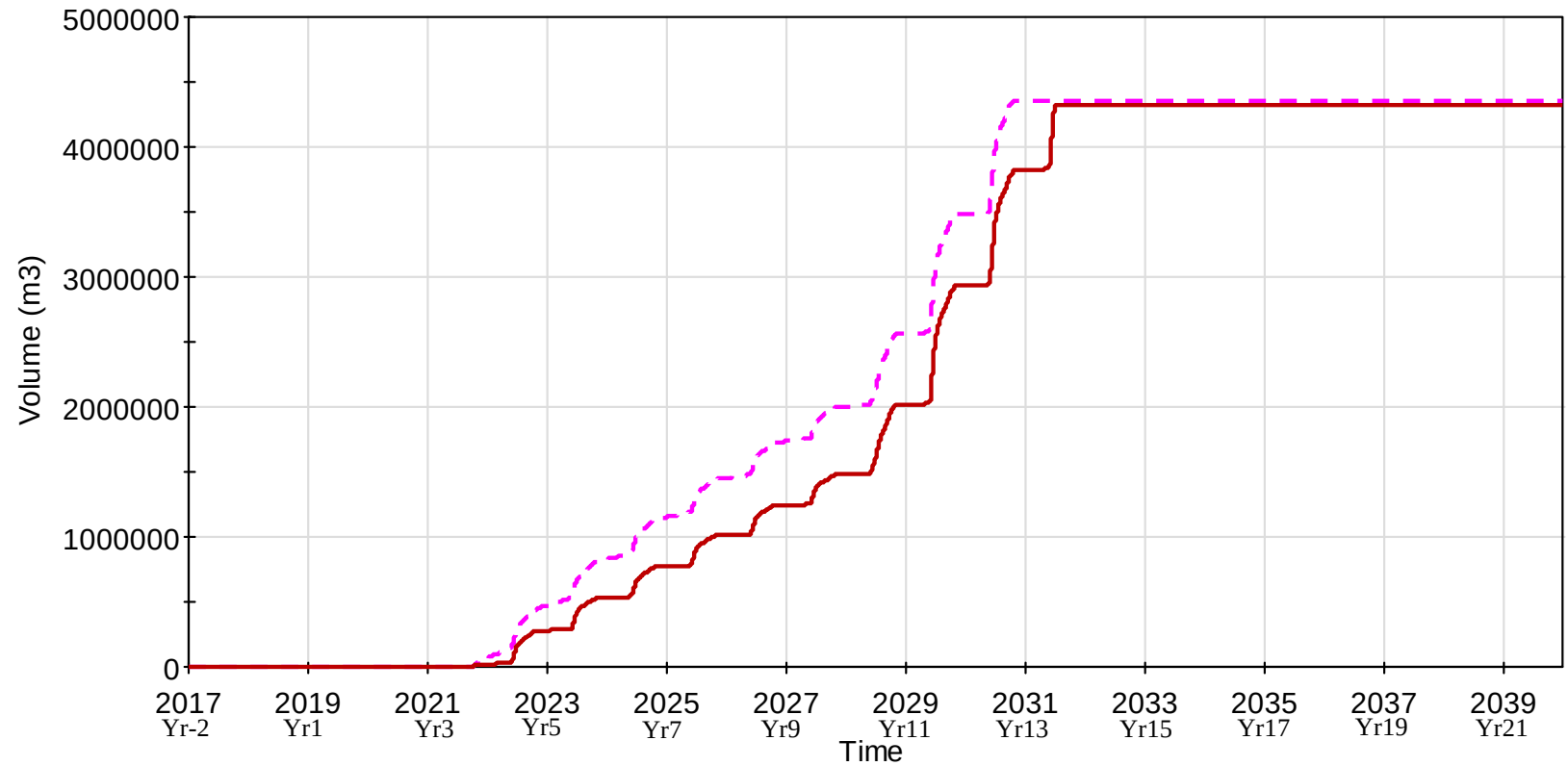
Back River Project

Date:
September 2015

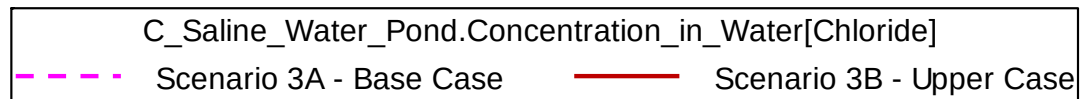
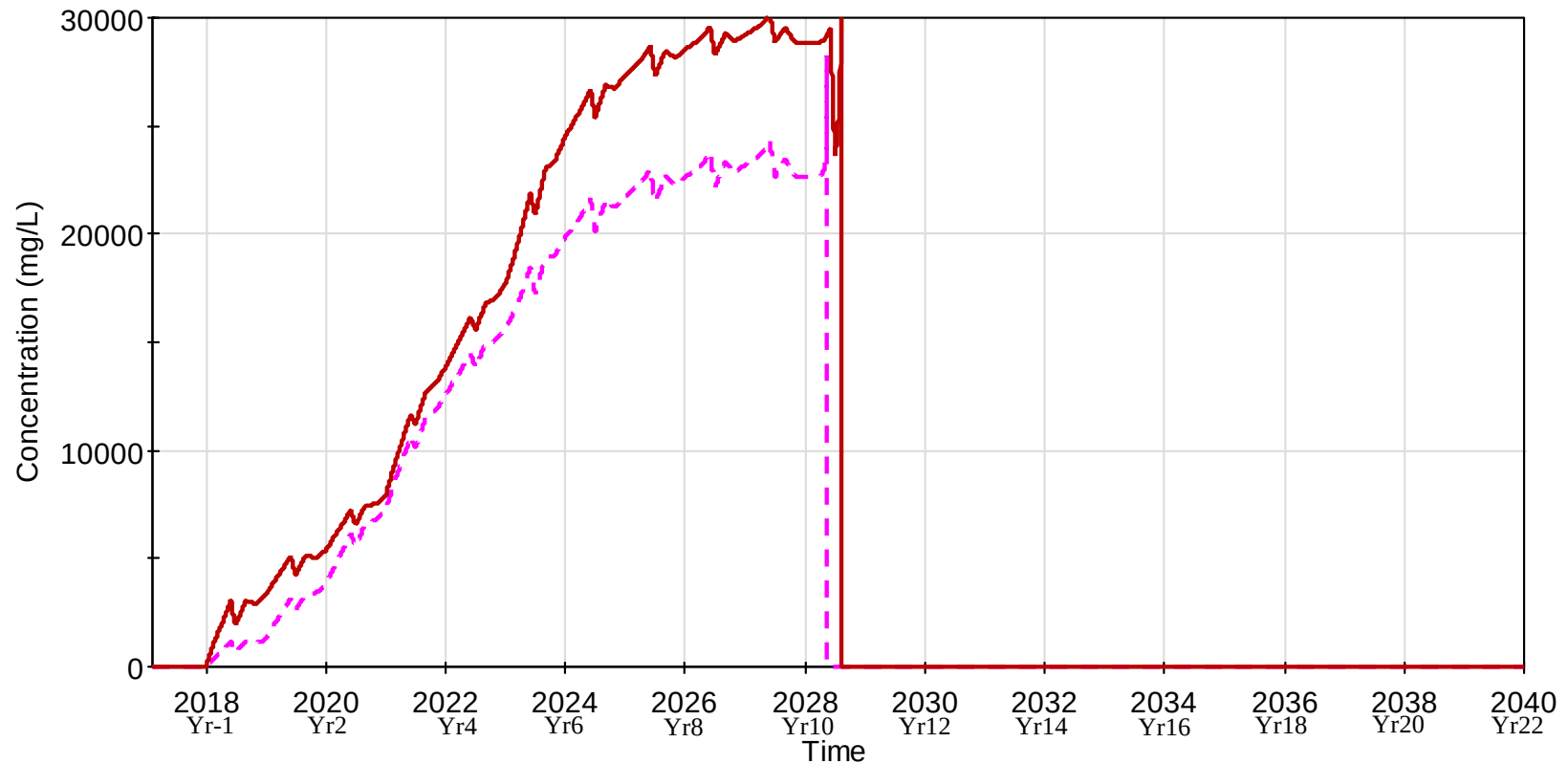
Approved:
SPB

Figure: **9-7**

Llama Volumes



Saline Pond Cl Concentrations



Water and Load Balance Report

Saline Water Pond Concentration - Sensitivity

Job No: 1CS020.00
Filename: WaterBalanceFigures.pptx

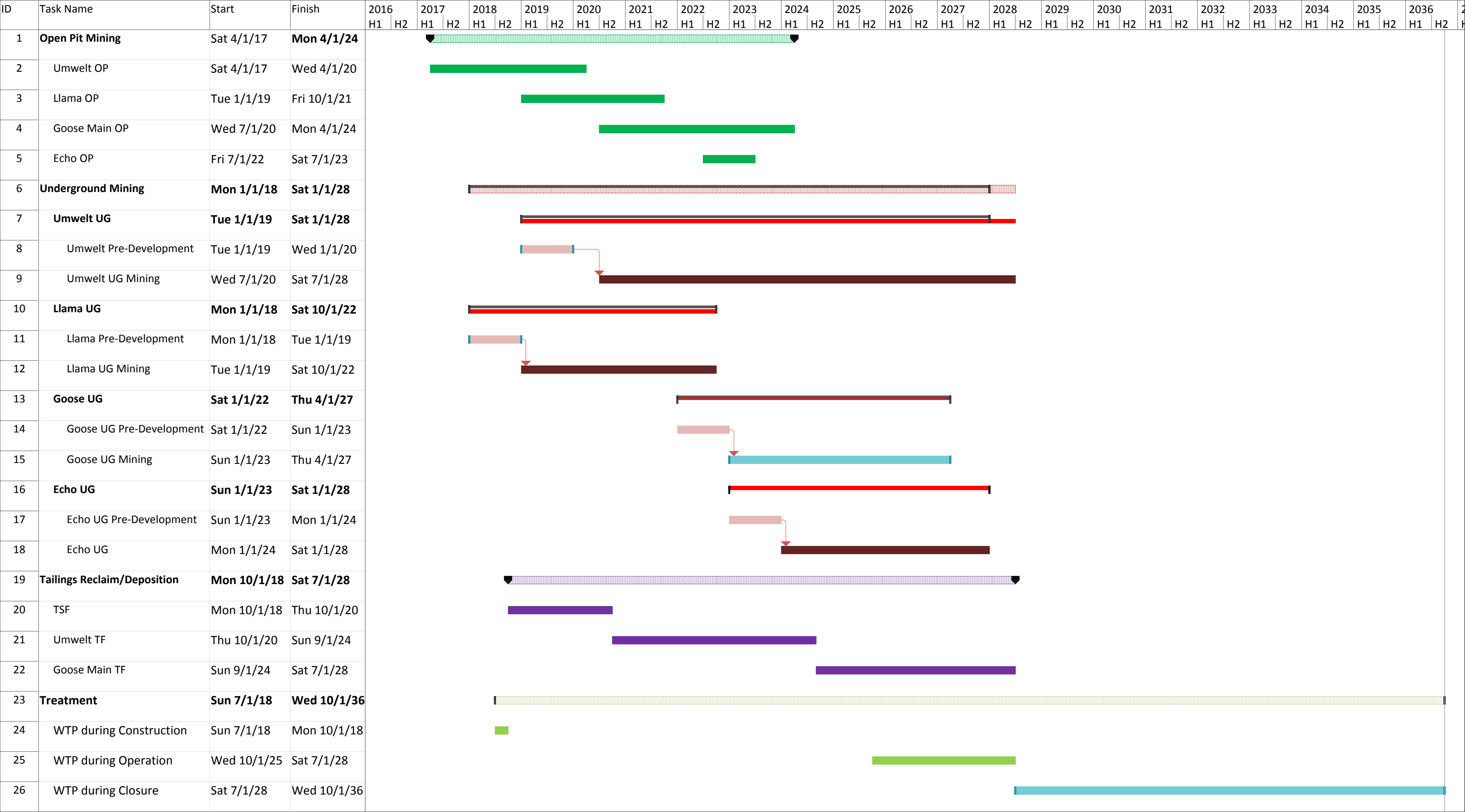
Back River Project

Date:
September 2015

Approved:
SPB

Figure: **9-10**

Appendix A – Back River Project Timeline



Project: ProjectTimeline_r20_FEIS
Date: Mon 9/21/15

Task

Split

Milestone

Summary

Project Summary

External Tasks

External Milestone

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

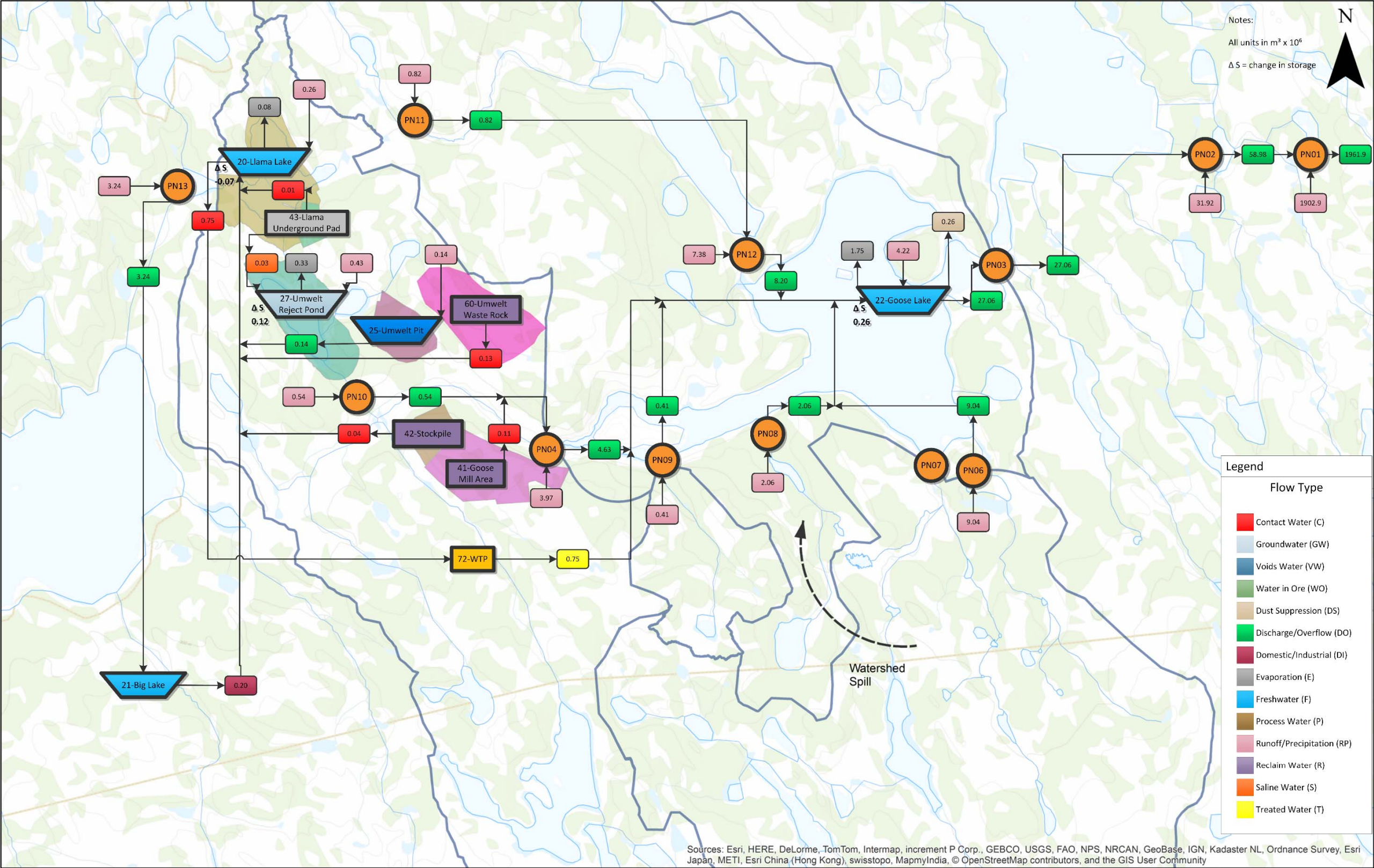
Deadline

Progress

Manual Progress

Page 1

Appendix B – Water Balance Figures



Phase 1: Yr-3,Q1 to Yr-1,Q3

Note:
Volumes shown in flow type box, illustrate total volumes during the phase.
Change in storage for reservoirs (i.e. Goose Lake) are illustrated adjacent to the respective shape.



Job No: 1CS020.008
Filename: Appendix B Figures.pptx

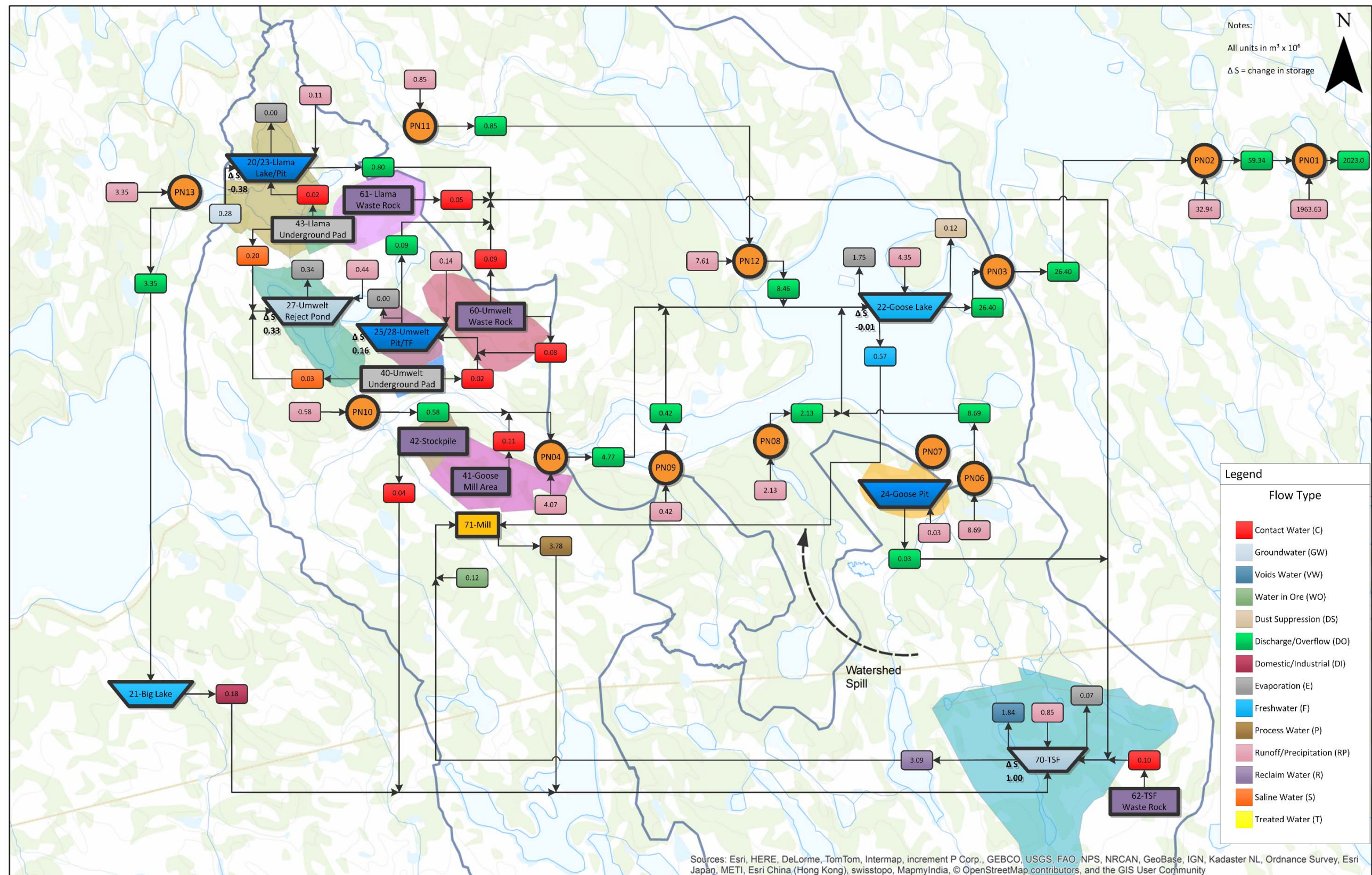


Back River Project

Water and Load Balance Report

Phase 1 - Construction

Date: September 2015
Approved: SPB
Figure: B-1



Phase 2 Stage 1: Yr-1,Q4 to Yr2,Q3

Note:

Volumes shown in flow type box, illustrate total volumes during the phase.

Change in storage for reservoirs (i.e. Goose Lake) are illustrated adjacent to the respective shape.



Job No: 1CS020.008

Filename: Appendix B Figures.pptx



Back River Project

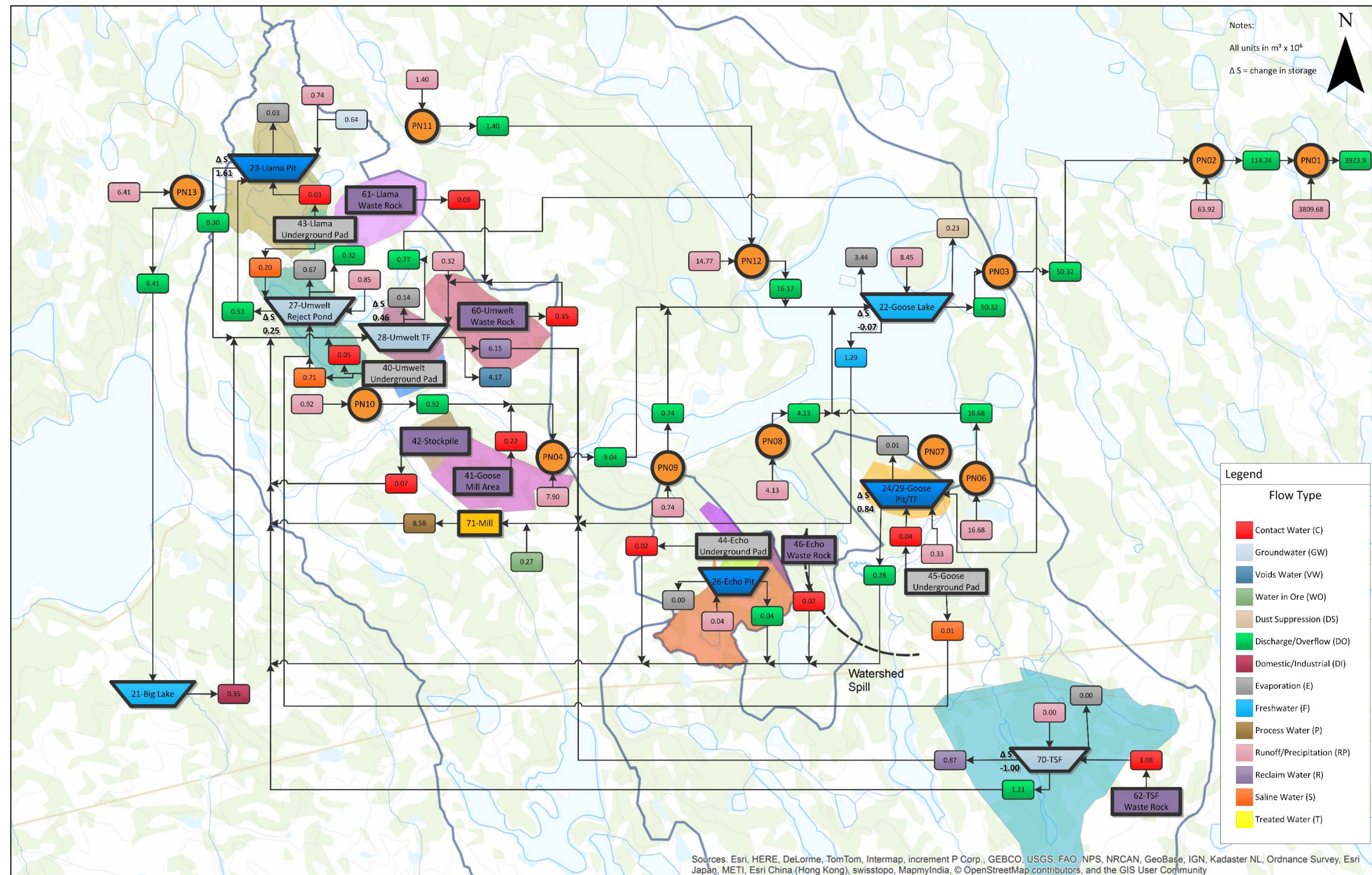
Water and Load Balance Report

Phase 2 Stage 2 – TSF Operation

Date:
September 2015

Approved:
SPB

Figure:
B-2



Phase 2 Stage 2: Yr2,Q4 to Yr6,Q3

Note:

Volumes shown in flow type box, illustrate total volumes during the phase.

Change in storage for reservoirs (i.e. Goose Lake) are illustrated adjacent to the respective shape.



Job No: 1CS020.008

Filename: Appendix B Figures.pptx



Back River Project

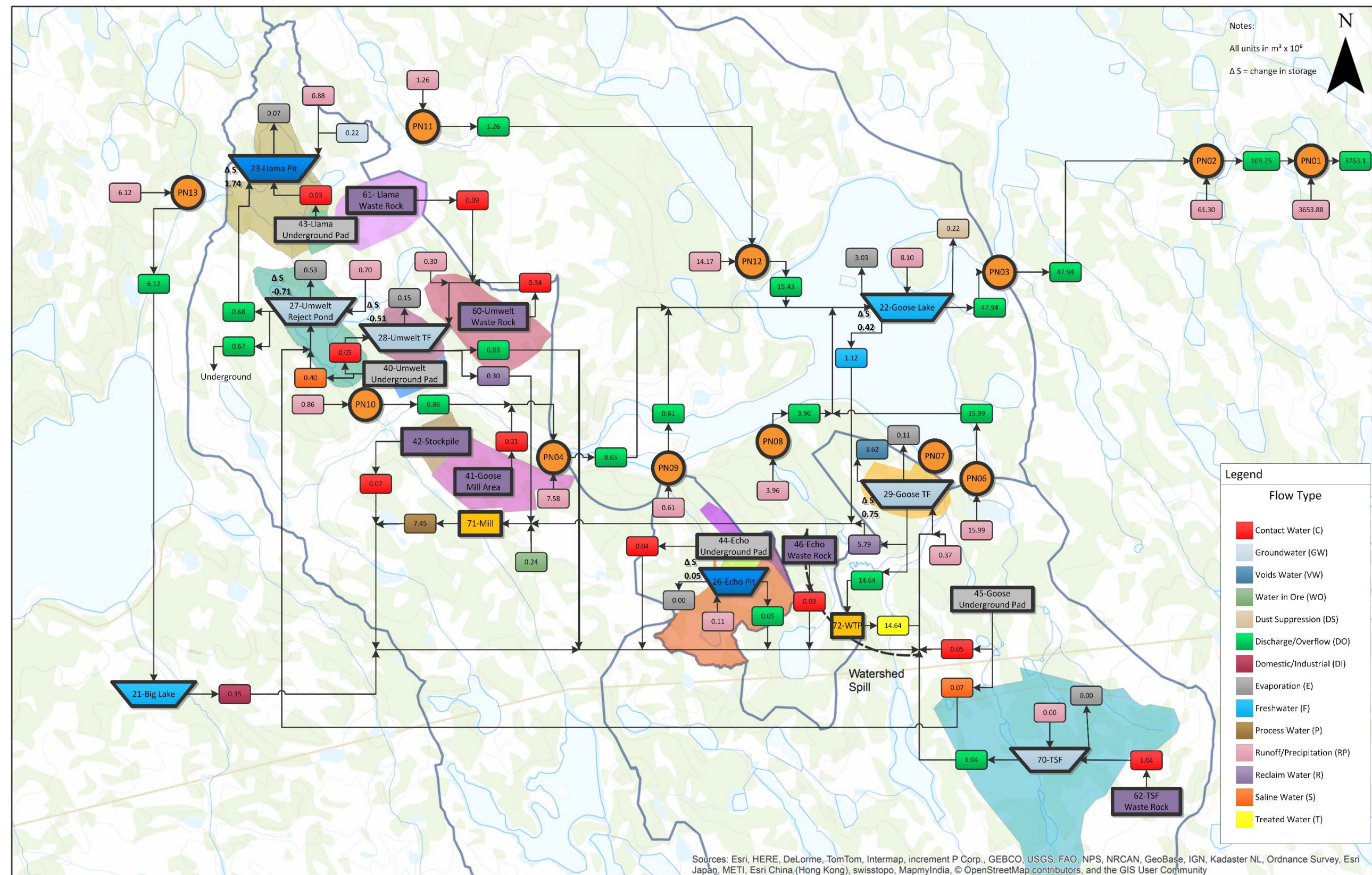
Water and Load Balance Report

Phase 2 Stage 2 – Umwelt TF Operation

Date:
September 2015

Approved:
SPB

Figure: **B-3**



Phase 2 Stage 3: Yr6,Q4 to Yr10,Q2

Note:

Volumes shown in flow type box, illustrate total volumes during the phase.

Change in storage for reservoirs (i.e. Goose Lake) are illustrated adjacent to the respective shape.



Job No: 1CS020.008

Filename: Appendix B Figures.pptx



Back River Project

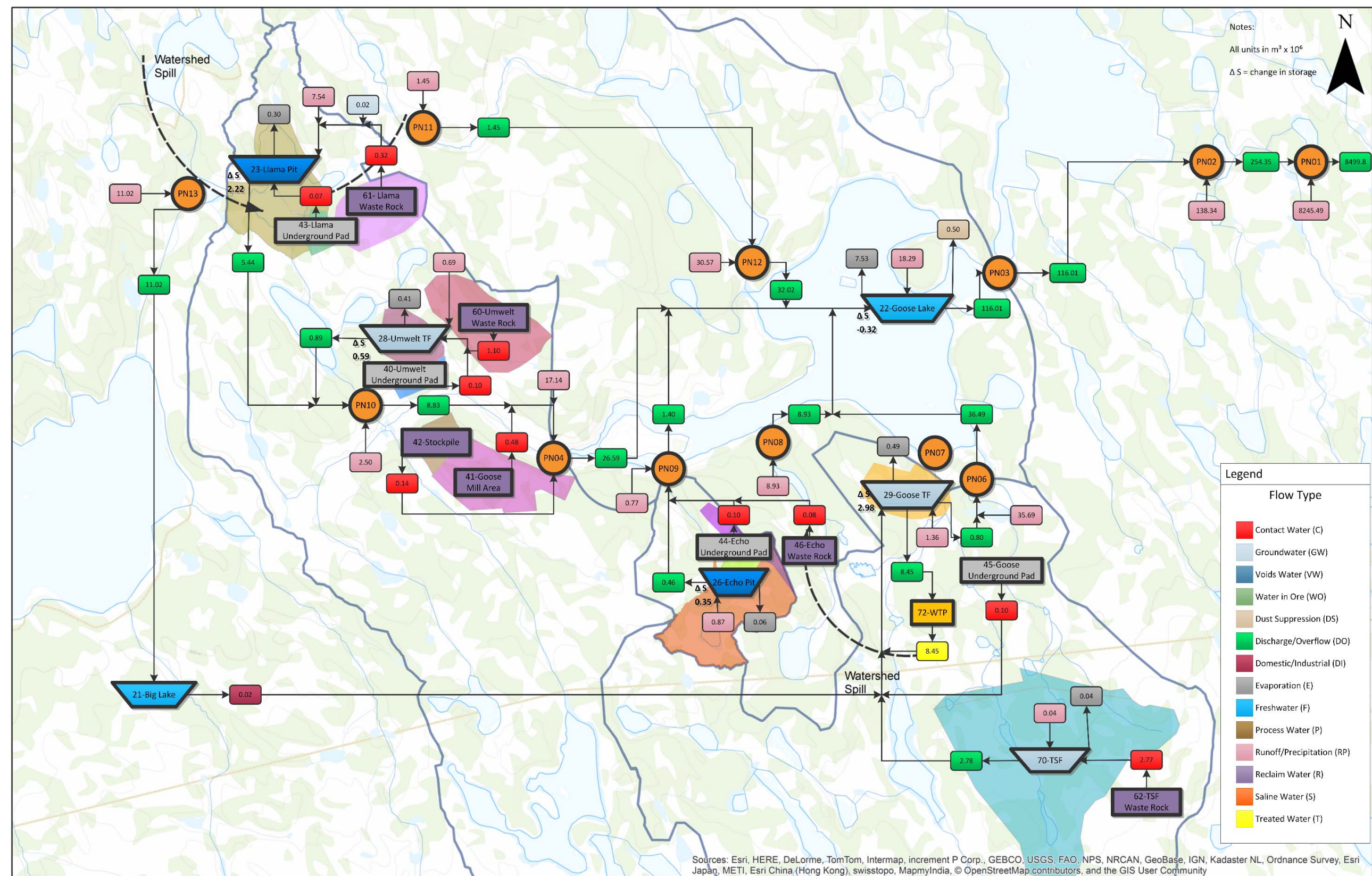
Water and Load Balance Report

Phase 2 Stage 3 – Goose Main TF Operation

Date:
September 2015

Approved:
SPB

Figure: **B-4**



Phase 3: Yr10,Q3 to Yr18,Q3

Note:
 Volumes shown in flow type box, illustrate total volumes during the phase.
 Change in storage for reservoirs (i.e. Goose Lake) are illustrated adjacent to the respective shape.



Job No: 1CS020.008
 Filename: Appendix B Figures.pptx



Back River Project

Water and Load Balance Report

Phase 3 – Closure

Date: September 2015
 Approved: SPB
 Figure: **B-5**