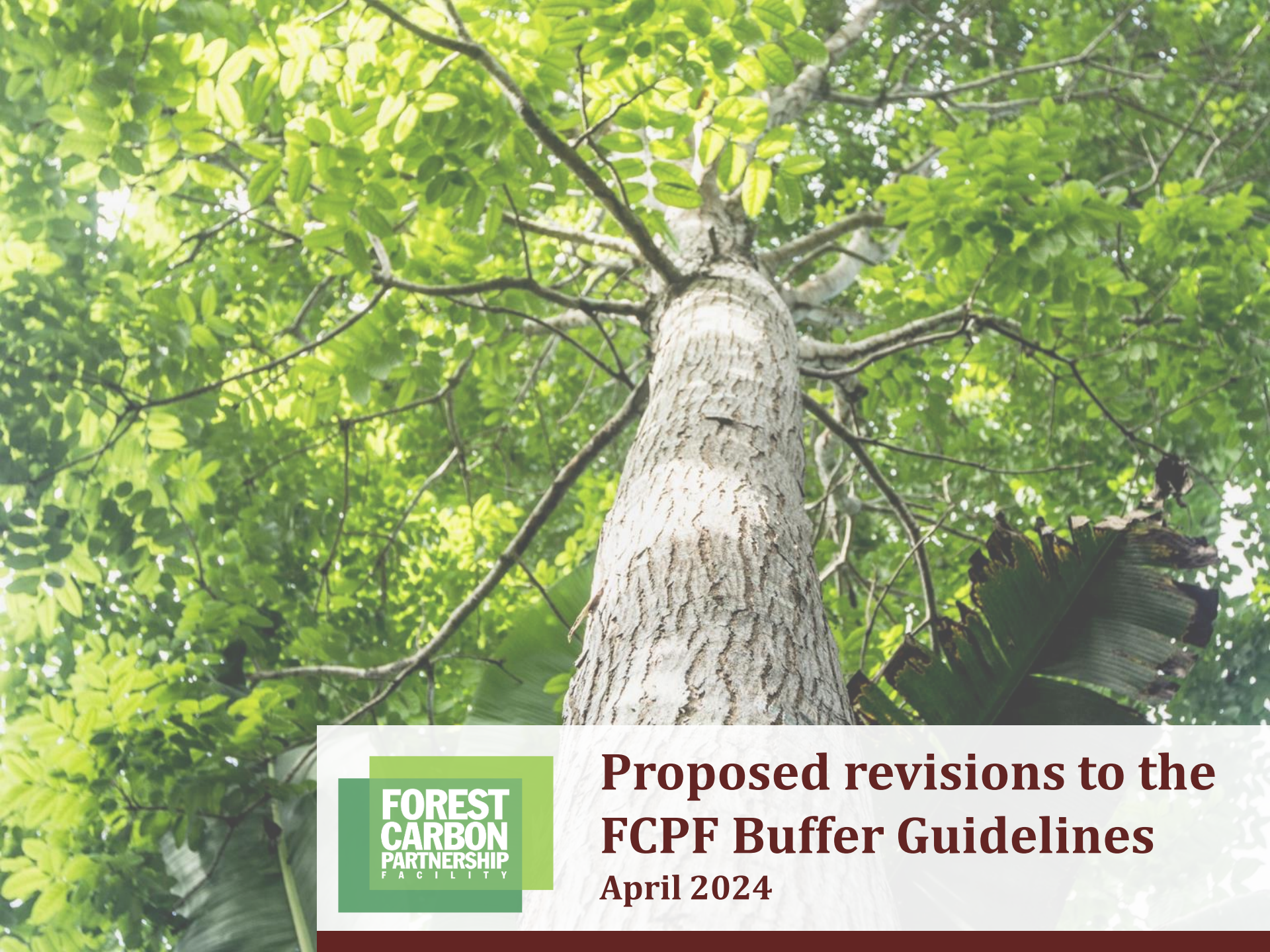


FOREST CARBON PARTNERSHIP FACILITY

Proposed revisions to the FCPF Buffer Guidelines

April 2024

Recap of discussion at CF27

At CF27, the Carbon Fund Participants decided to approve version 4.1 of the FCPF Buffer Guidelines (BGL), which included the following main changes:

1. **The equation used to estimate the amount of buffer ERs to be cancelled as a result of a reversal has been modified** to reflect that all Total ERs may be subject to reversals and to establish a reversal liability limit

2. **ER Programs having suffered a reversal are required to replenish any Reversal Buffer and Pooled Reversal Buffer ERs** they may have cancelled as a result of that reversal

3. **An ER Program affected by a reversal shall not be to transfer any Excess ERs held in its account until it has replenished the Reversal Buffer and the Pooled Reversal Buffer**

Recap of discussion at CF27

Additionally, the CFPs requested the FMT to conduct further consultations on the remaining changes it proposed to the Buffer Guidelines before CF27. These changes include:

1. **Merging the Reversal Buffer and Pooled Reversal Buffer** into a single Pooled Reversal Buffer to allow for total pooling

2. **Cancelling Uncertainty Buffer ERs and any available Excess ERs in case of a reversal before cancelling Pooled Reversal Buffer ERs beyond the contribution of the affected ER Program** to the Pooled Buffer

3. **Disallowing the release of Uncertainty Buffer ERs** in cases **where the ER Program has not yet fully replenished the Pooled Reversal Buffer** after a reversal

4. **Requiring Uncertainty Buffer ERs to contribute to the Pooled Reversal Buffer when they are released** due to improved ER estimations

5. **Requiring ER Programs that have not completely replenished the Pooled Reversal Buffer at the end of the Crediting Period** to **cancel any remaining Excess ERs** held by such Programs **up to the amount required to compensate** their Pooled Reversal Buffer debit

6. **Establishing that Uncertainty Buffer ERs shall only be transferred to an equivalent buffer account at the end of the Crediting Period if** the ER Program **has completely replenished any Pooled Reversal Buffer** debits

A. Overview of current FCPF Buffer Guidelines (BGL) (version 4.1)

How are reversals addressed in the FCPF BGL version 4.1?

- The FCPF Standard **addresses reversals through the use of buffers**, which are ER reserves that **back up ERs transferred by ER Programs** so that such ERs **can be considered as "permanent"**

- The current version (v 4.1) of the FCPF establishes **two Reversal Buffers**:

    - **An ER Reversal Buffer for each ER Program** and
    - **A "shared" Pooled Reversal Buffer**

- ER **Programs contribute to these buffers every time they generate ERs**

- The **size of their contributions depends** on the **amount of Total ERs they have produced and** the results of the **application of the Reversal Risk Assessment Tool**

- **Additionally**, the FCPF Standard establishes an **Uncertainty Buffer** with the purpose of **managing uncertainty and providing incentives to improve the accuracy** of ER estimates over time

How do buffers work in the FCPF?

Total volume of verified ERs generated by an ER Program in a monitoring period

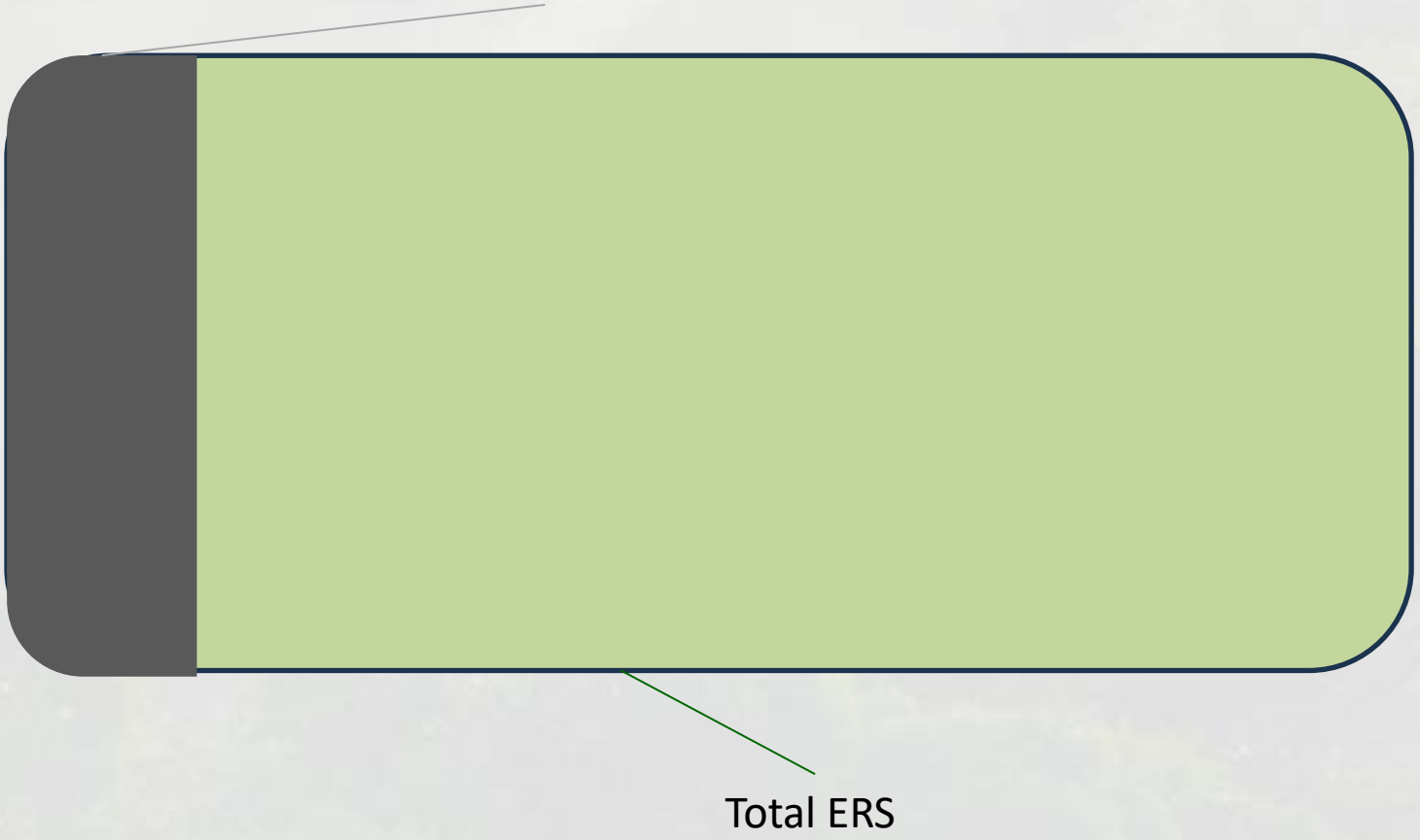
How do buffers work in the FCPF?

Verified ERs for which the Program cannot transfer title, double counted or compensated more than once, etc.

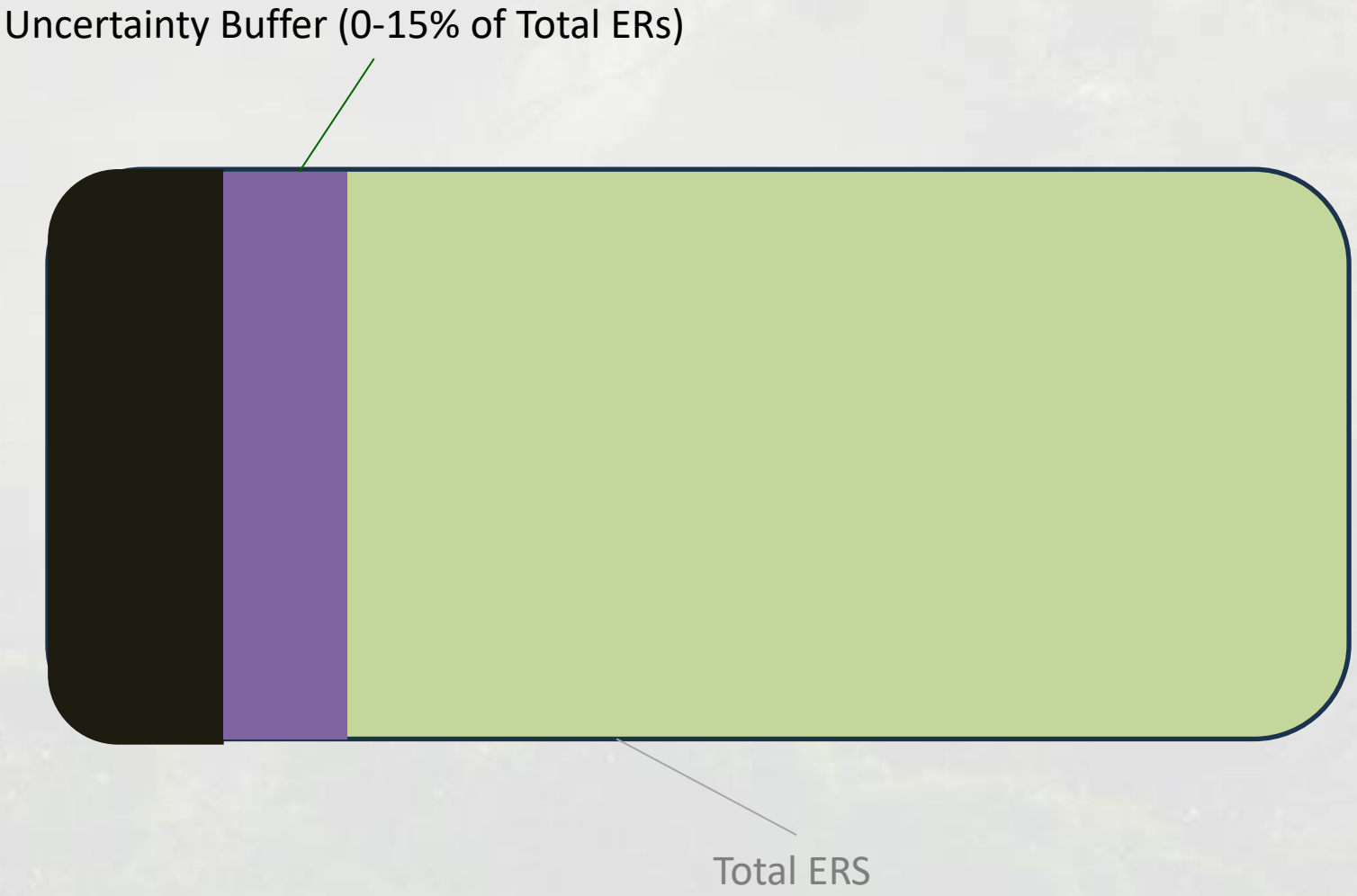
Total volume of verified ERs generated by an ER Program in a monitoring period

How do buffers work in the FCPF?

Verified ERs for which the Program cannot transfer title, double counted or compensated more than once, etc.



How do buffers work in the FCPF?



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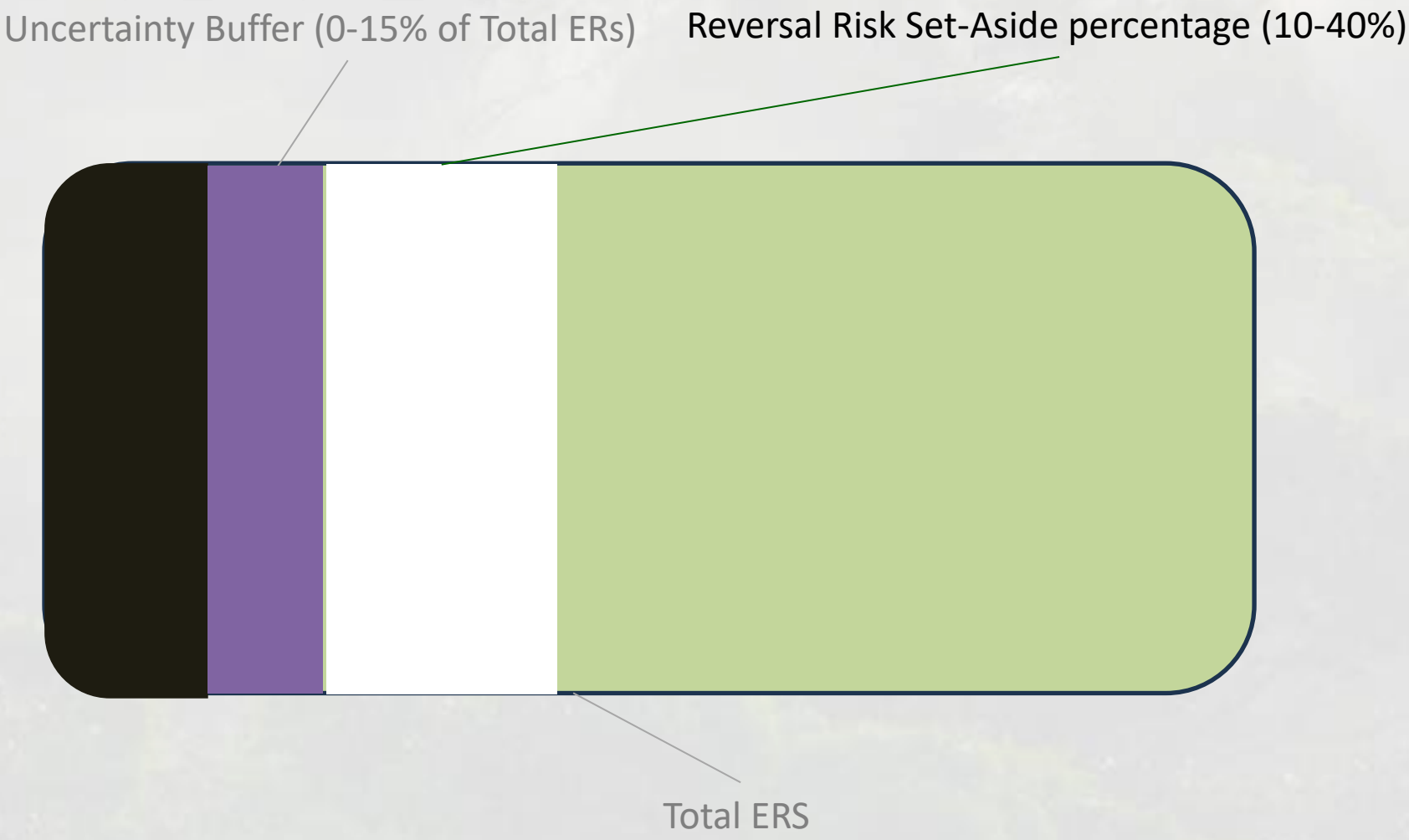
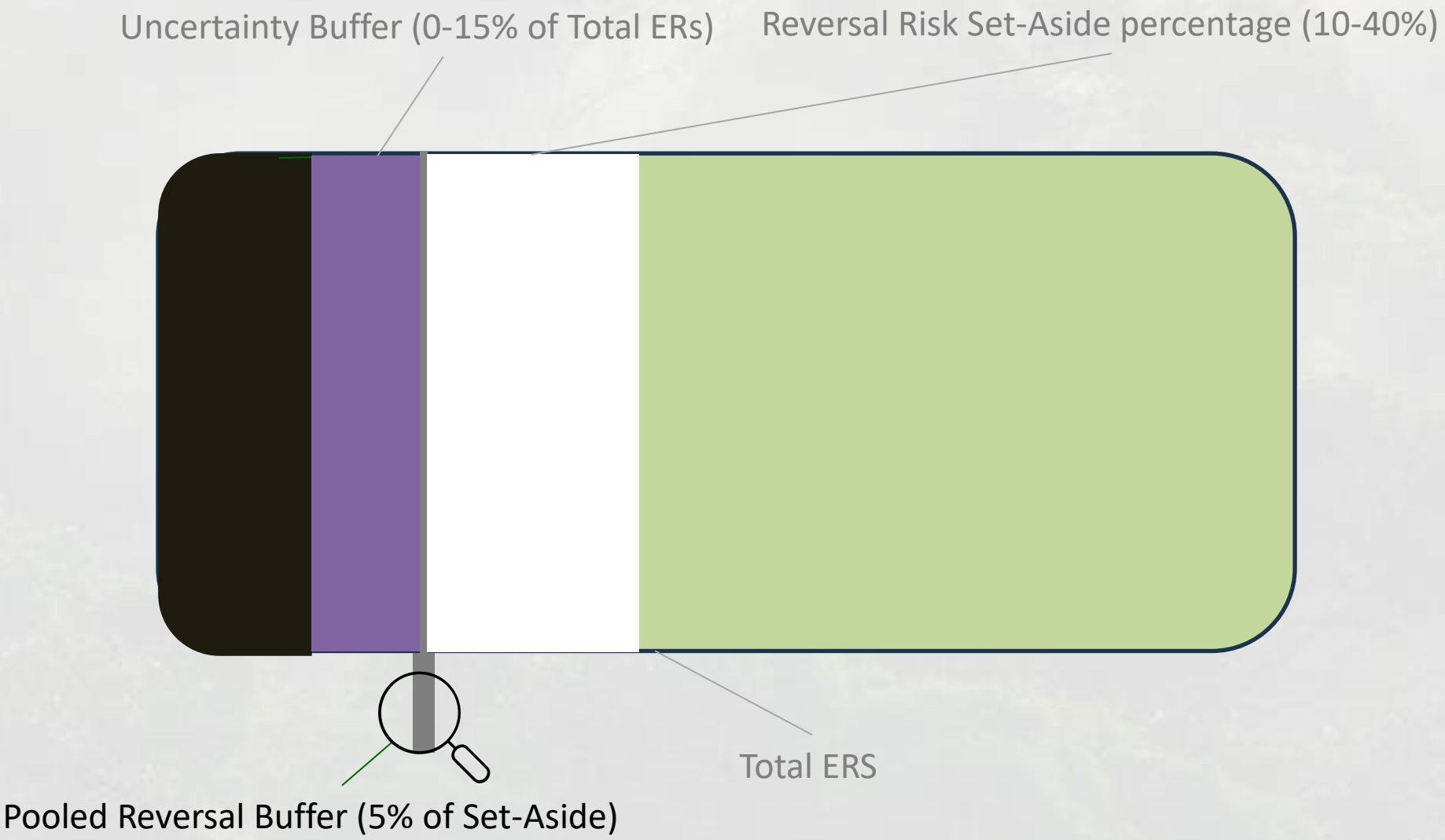
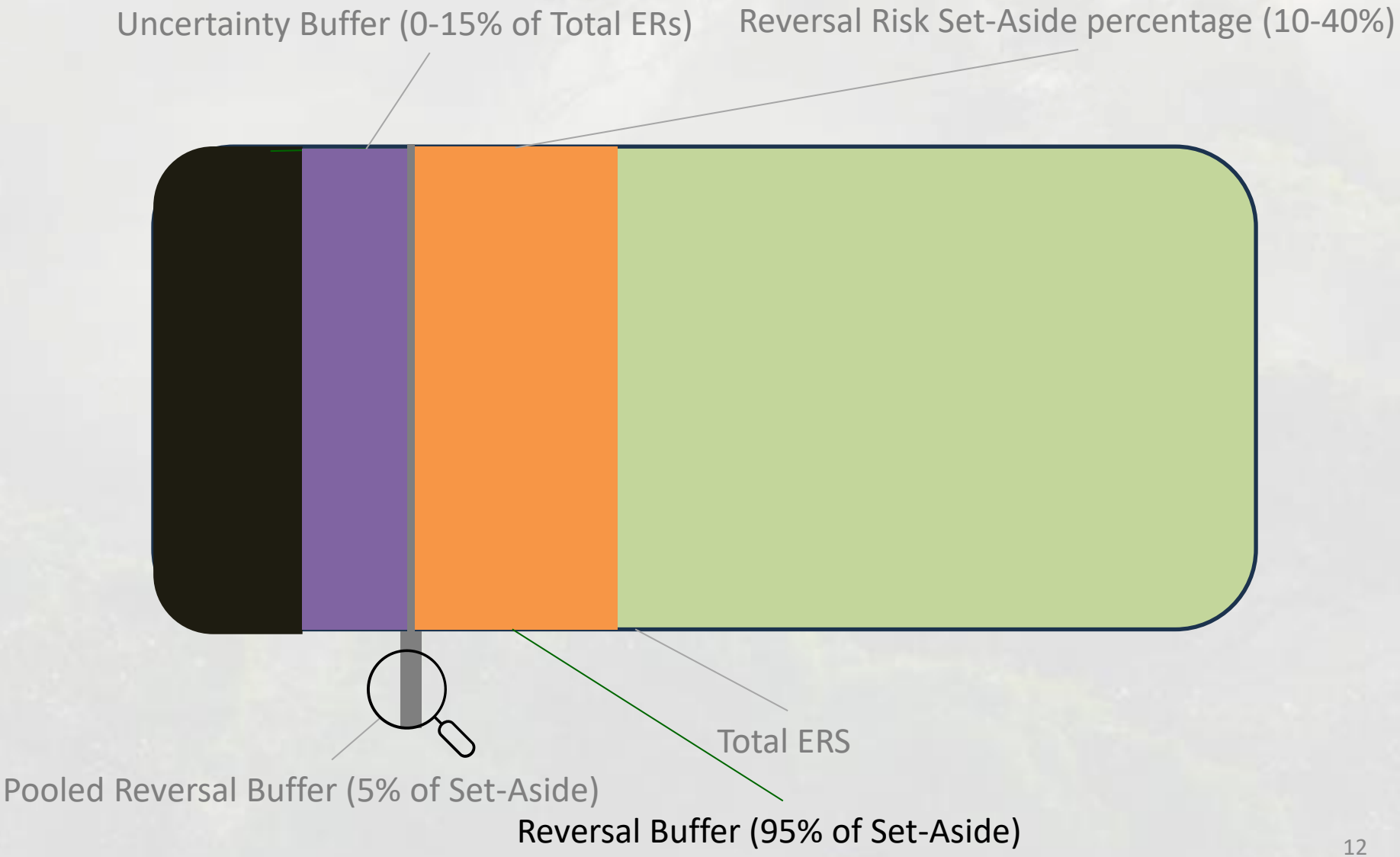


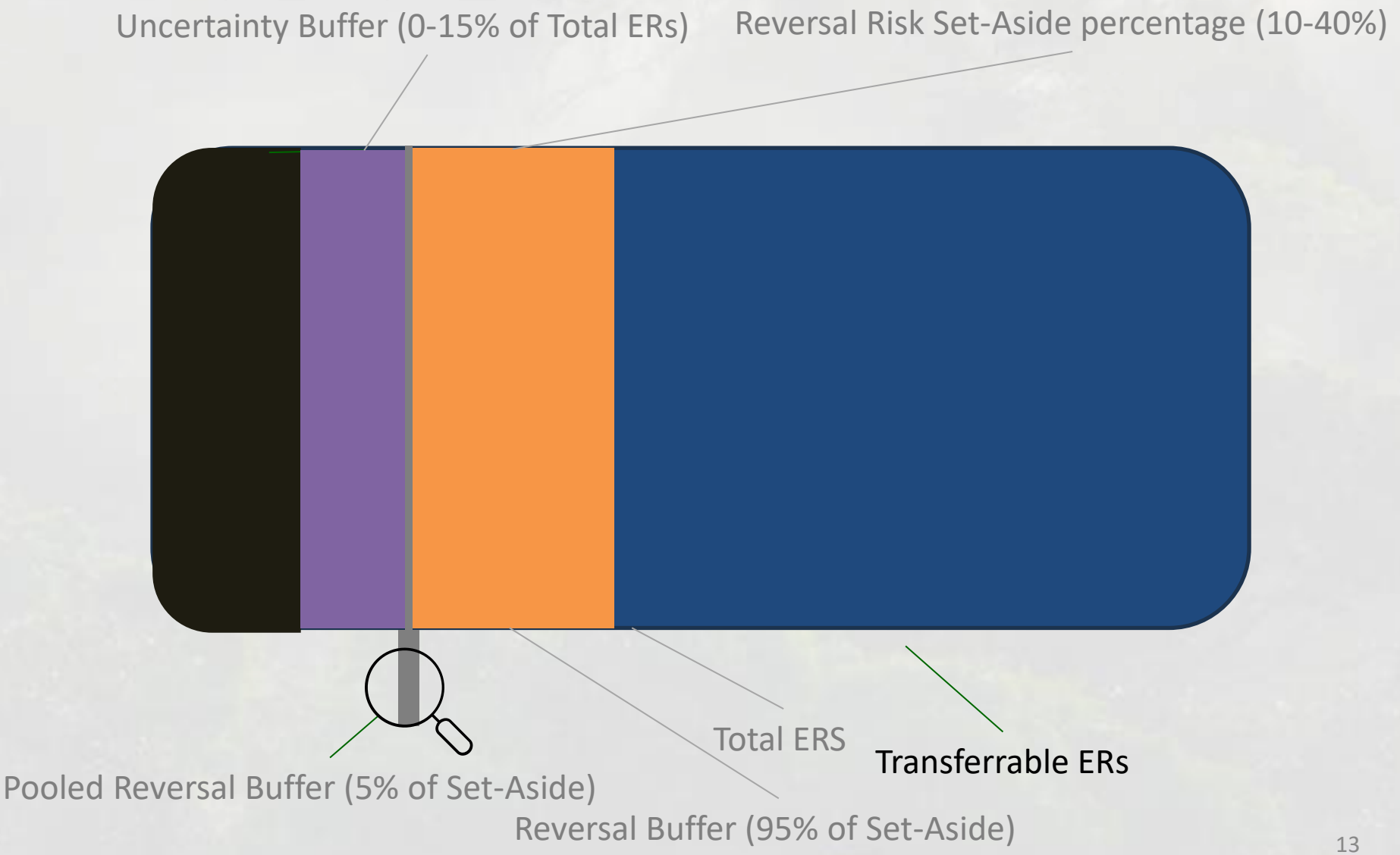
How do buffers work in the FCPF?



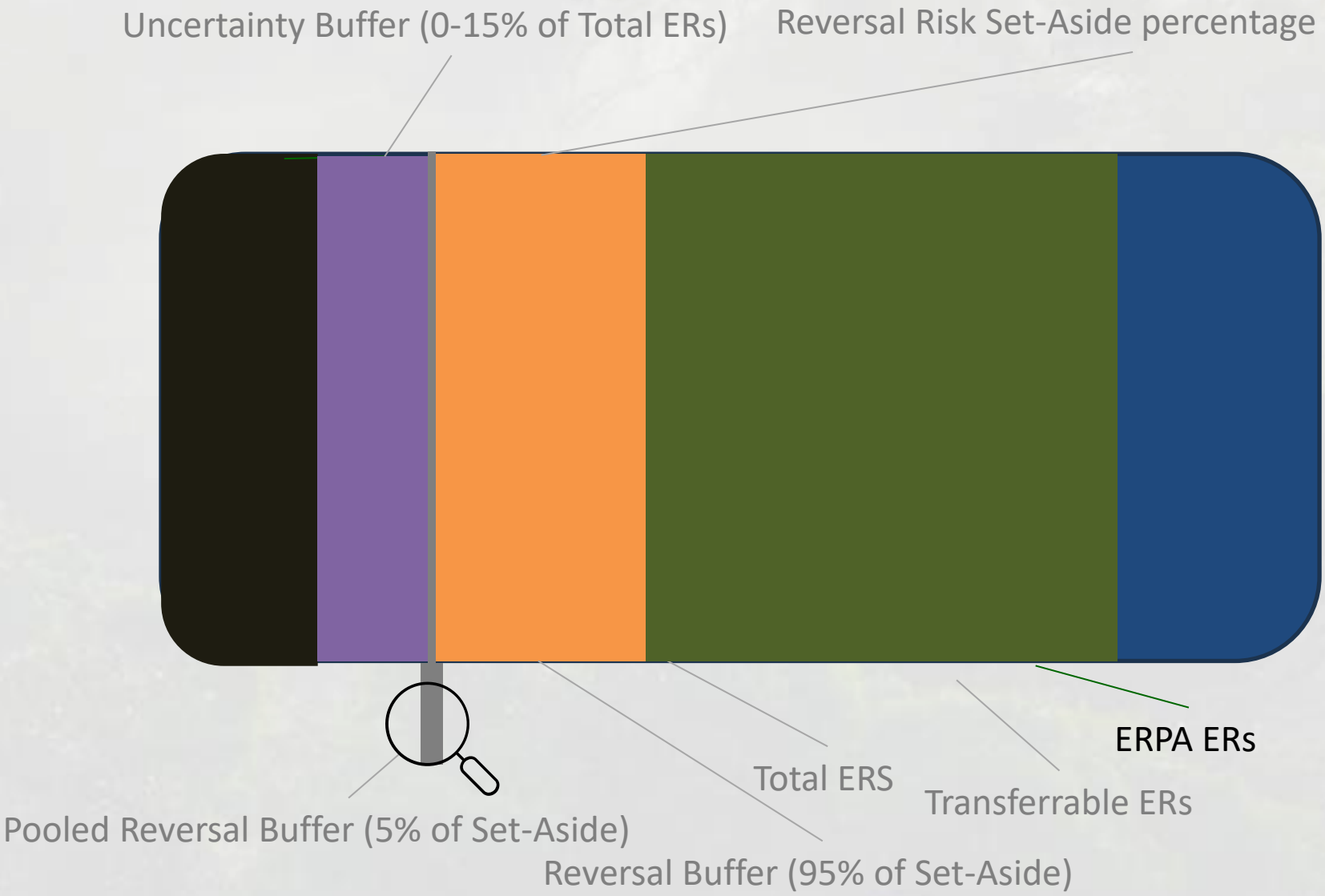
How do buffers work in the FCPF?



How do buffers work in the FCPF?



How do buffers work in the FCPF?



How do buffers work in the FCPF?

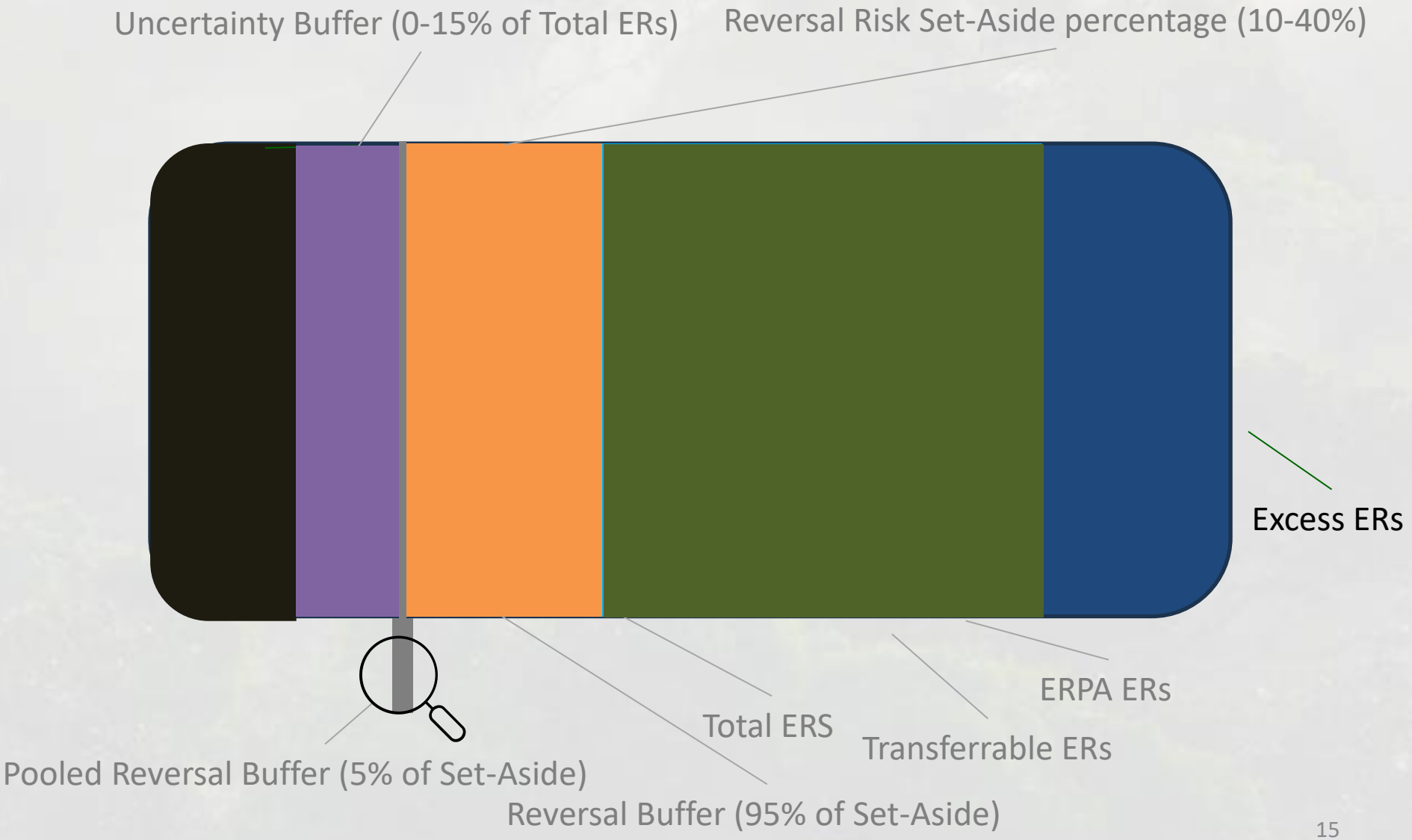


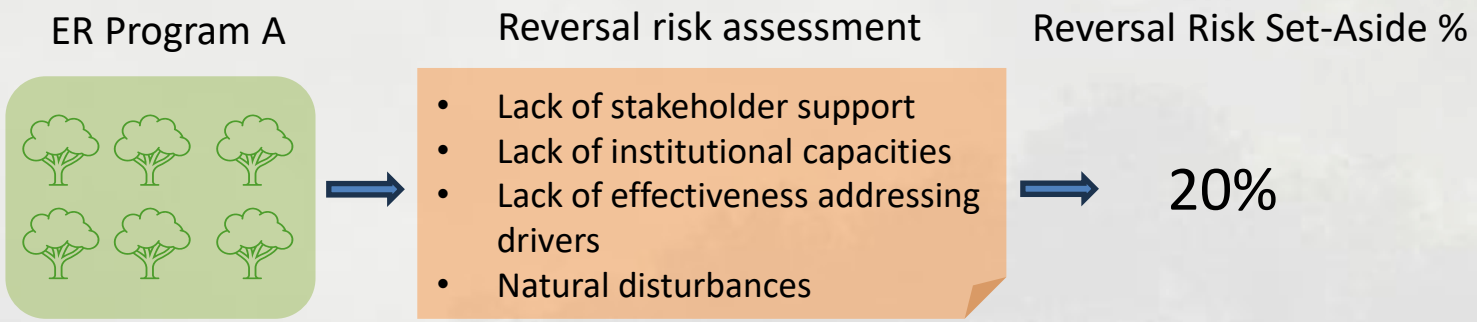
Illustration of a large reversal scenario under the FCPF BGL version 4.1

In this scenario, an ER Program performs as follows:

- **Year 0**: the ER Program´s ERPD is **accepted and starts implementation**
- **Year 1:** the ER Program **generates ERs**
- **Year 2:** the ER Program **experiences a large reversal**
- **Year 3:** the ER Program **produces ERs again**
- **Year 4:** the ER Program **does not generate ERs**, but **improves its ER estimates**
- **Year 5:** the ER Program **does not generate ERs and the Crediting Period ends**

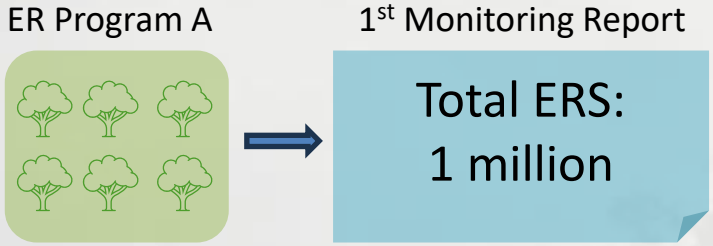
The scenario aims to show a simplified illustration of how the BGL version 4.1 work to facilitate understanding the rationale for the changes proposed

Year 0: the ER Program´s ERPD is accepted and starts implementation



- The ER Program **applies the Reversal Risk Assessment Tool** in Year 0 (before the start of the crediting period) and obtains **20% as the reversal risk set-aside percentage**

Year 1: the ER Program generates ERs



- In Year 1, the ER Program submits a Monitoring Report that shows **Total ERs for 1 million tCO2e**

Year 1: the ER Program generates ERs

ER Program A

1st Monitoring Report

Total ERS:
1 million

Table 1. Quantification Uncertainty Conservativeness Factors

Aggregate Uncertainty of ERs	Conservativeness Factor
≤ 15%	0%
> 15% and ≤ 30%	4%
> 30% and ≤ 60%	8%
> 60% and ≤ 100%	12%
> 100%	15%

- In accordance with the BGL, before being able to transfer ERs or contribute to the reversal buffers, **the ER Program needs to identify the applicable Conservativeness Factor** based on the **aggregate uncertainty of the ERs** using Table 1 of the BGL

Year 1: the ER Program generates ERs

ER Program A

1st Monitoring Report

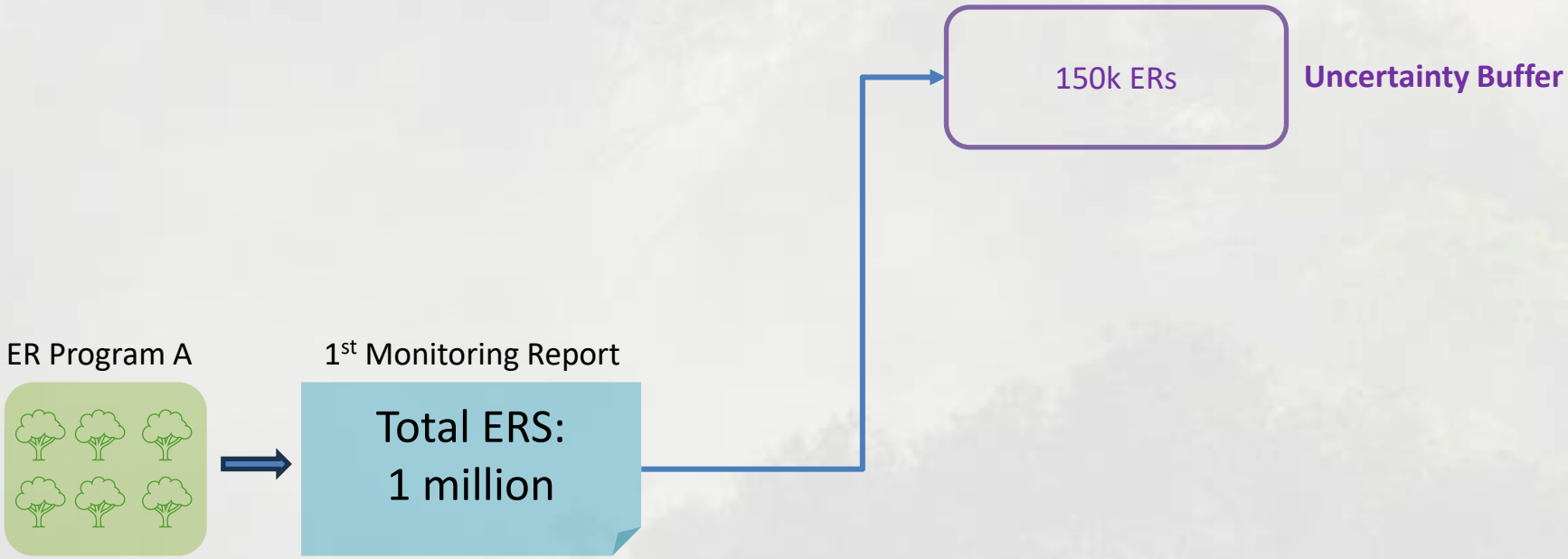
Total ERS:
1 million

Table 1. Quantification Uncertainty Conservativeness Factors

Aggregate Uncertainty of ERs	Conservativeness Factor
≤ 15%	0%
> 15% and ≤ 30%	4%
> 30% and ≤ 60%	8%
> 60% and ≤ 100%	12%
> 100%	15%

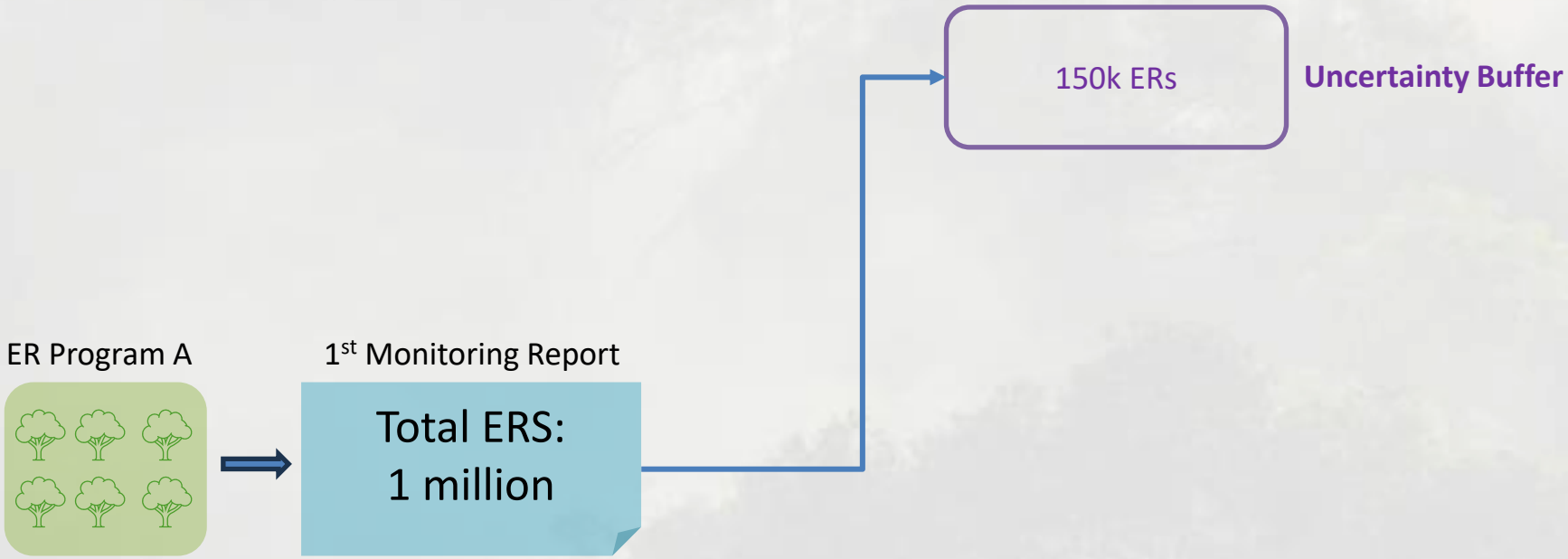
- The reported **aggregate uncertainty of these ERs is 105%,** so, following Table 1 of the BGL, the ER Program applies a **Conservativeness Factor of 15%**

Year 1: the ER Program generates ERs



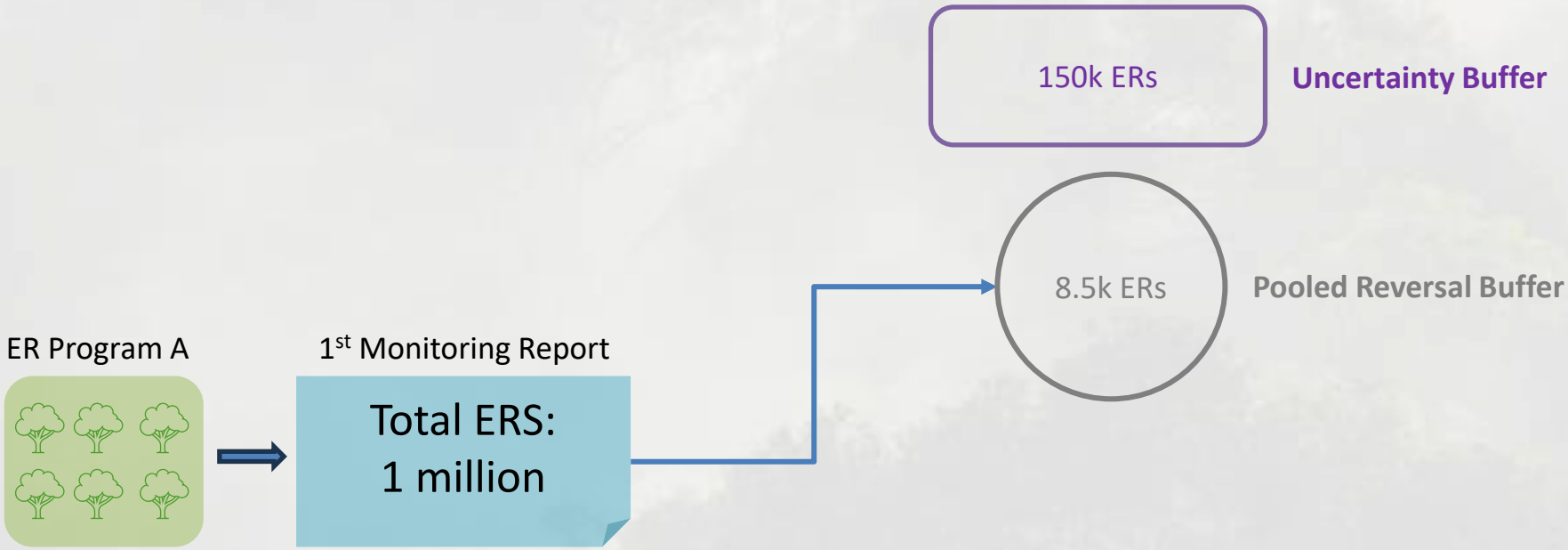
- Consequently, **150k ERs are transferred** to the **Uncertainty Buffer**

Year 1: the ER Program generates ERs



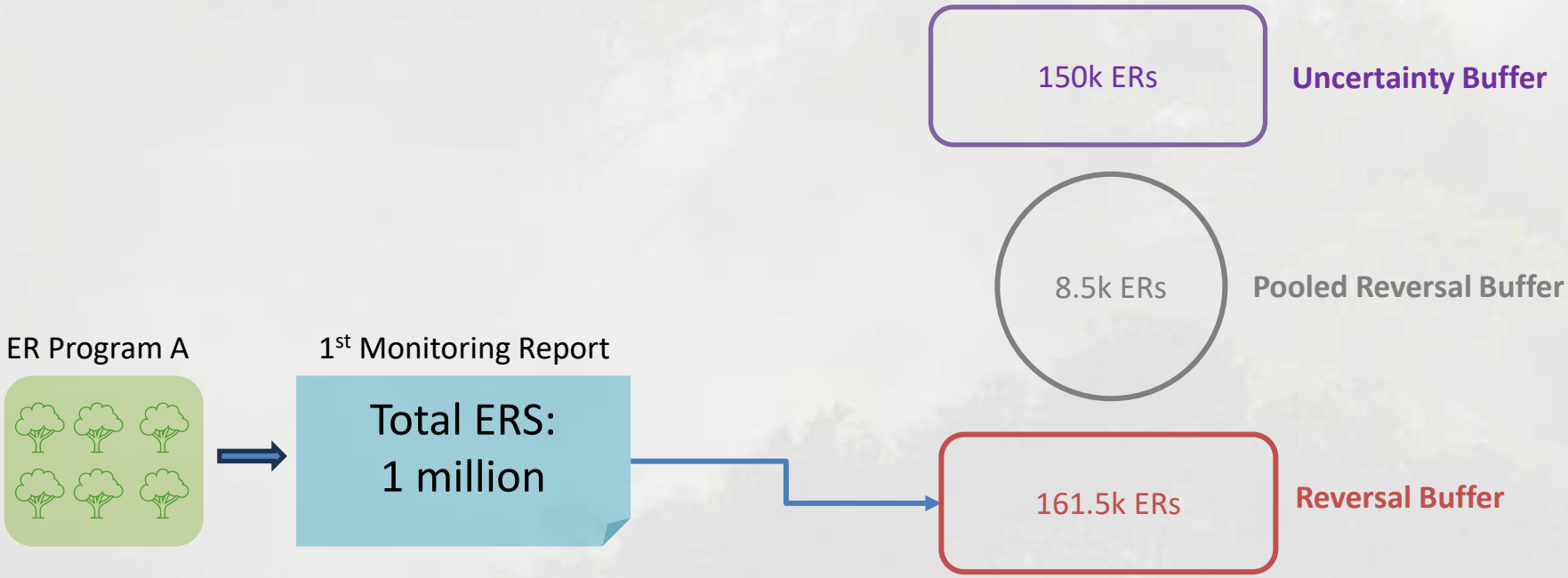
- After transferring ERs to the Uncertainty Buffer, **the ER Program has 850k ERs remaining**.
- According to the BGL, **this amount serves as the basis for estimating the amount of ERs** that should be allocated **to the two reversal buffers**.
- This number is estimated by **multiplying** the **Reversal Risk Set-Aside Percentage (20%)** by the **850k ERs**, for a total of **170k ERs**

Year 1: the ER Program generates ERs



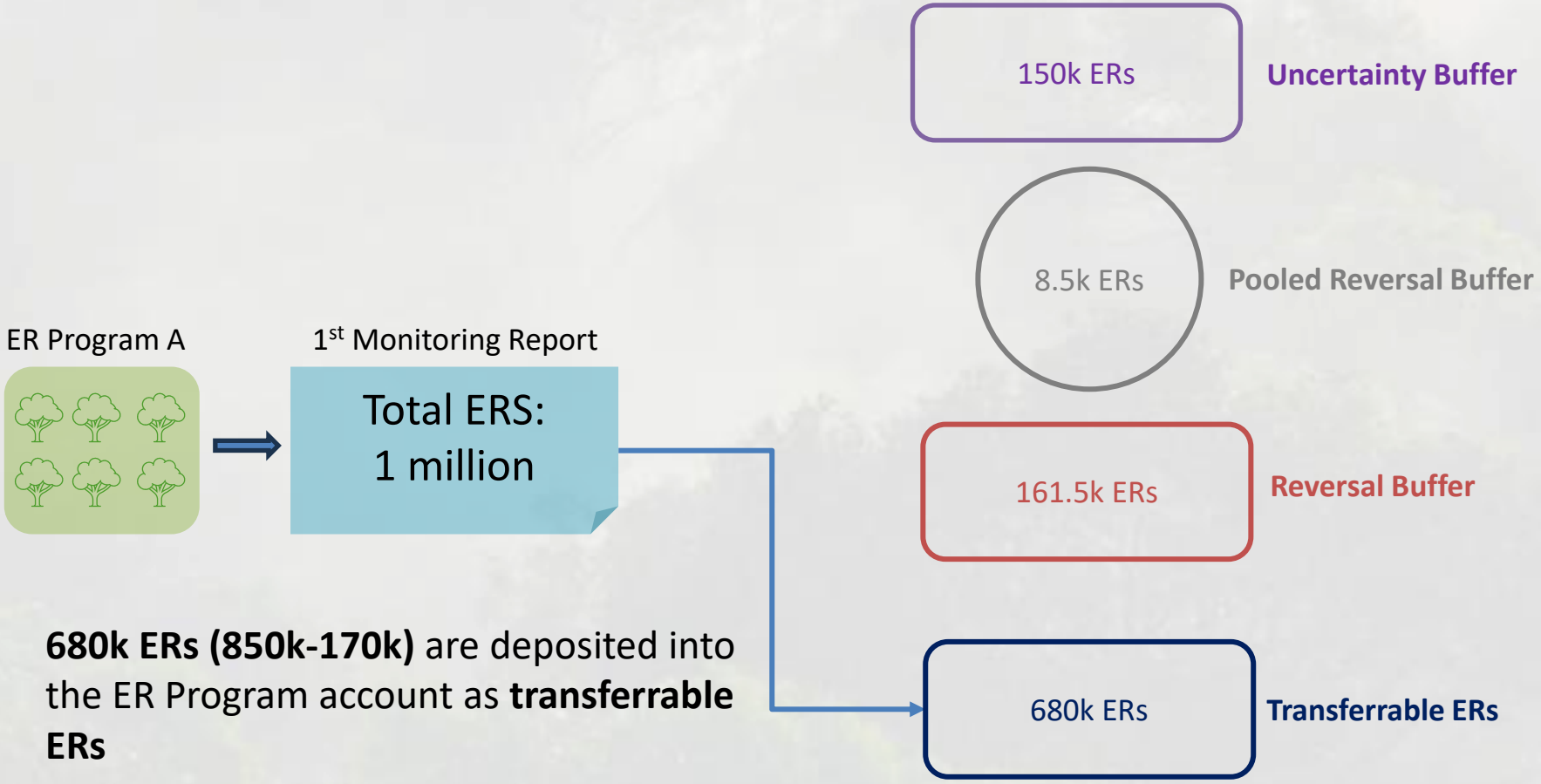
- Following the BGL, **5% of this amount (8.5k)** is deposited into the **Pooled Reversal Buffer**

Year 1: the ER Program generates ERs



- The **remainder** is transferred to the **Reversal Buffer account**

Year 1: the ER Program generates ERs



- **680k ERs (850k-170k)** are deposited into the ER Program account as **transferrable ERs**

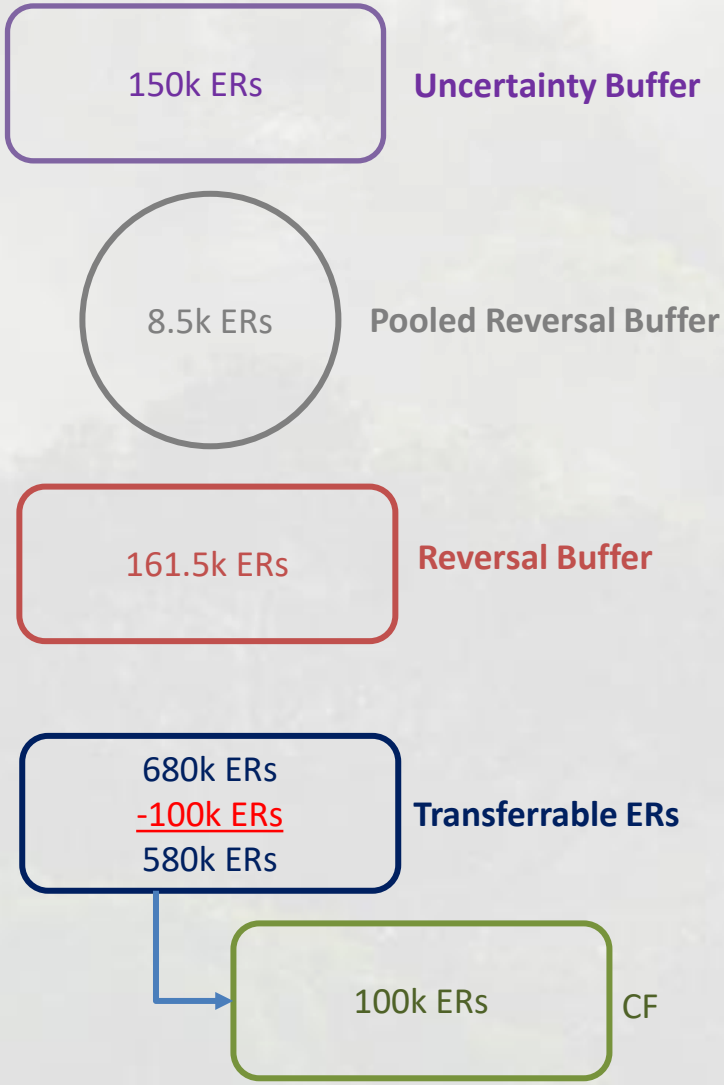
Year 1: the ER Program generates ERs

ER Program A

1st Monitoring Report

Total ERS:
1 million

- **100k are paid by the CF based on the ERPA**, the **remaining become Excess ERs**



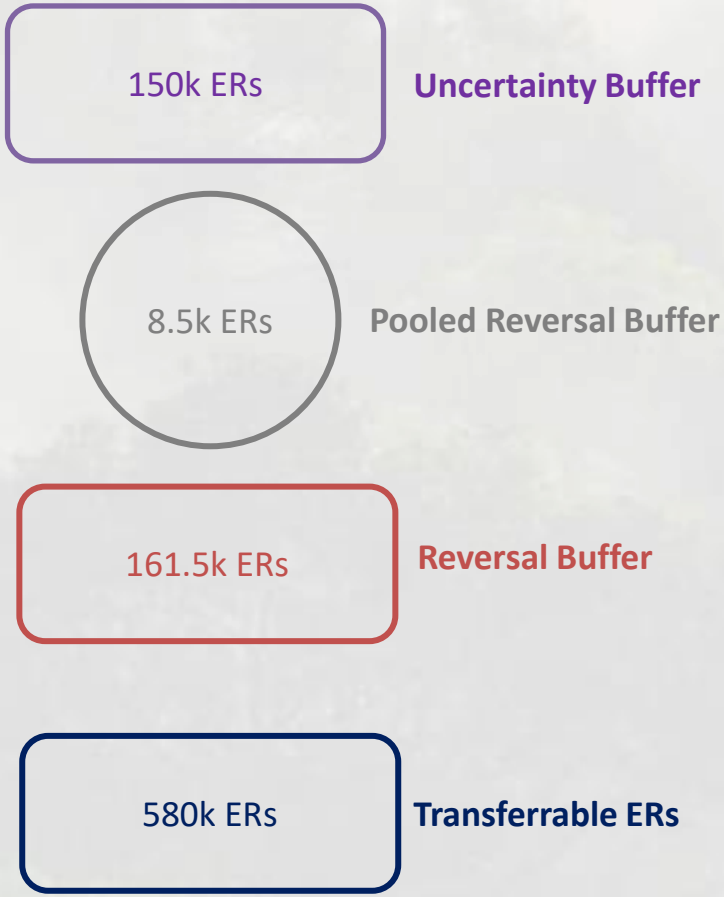
Year 2: the ER Program experiences a large reversal

ER Program A

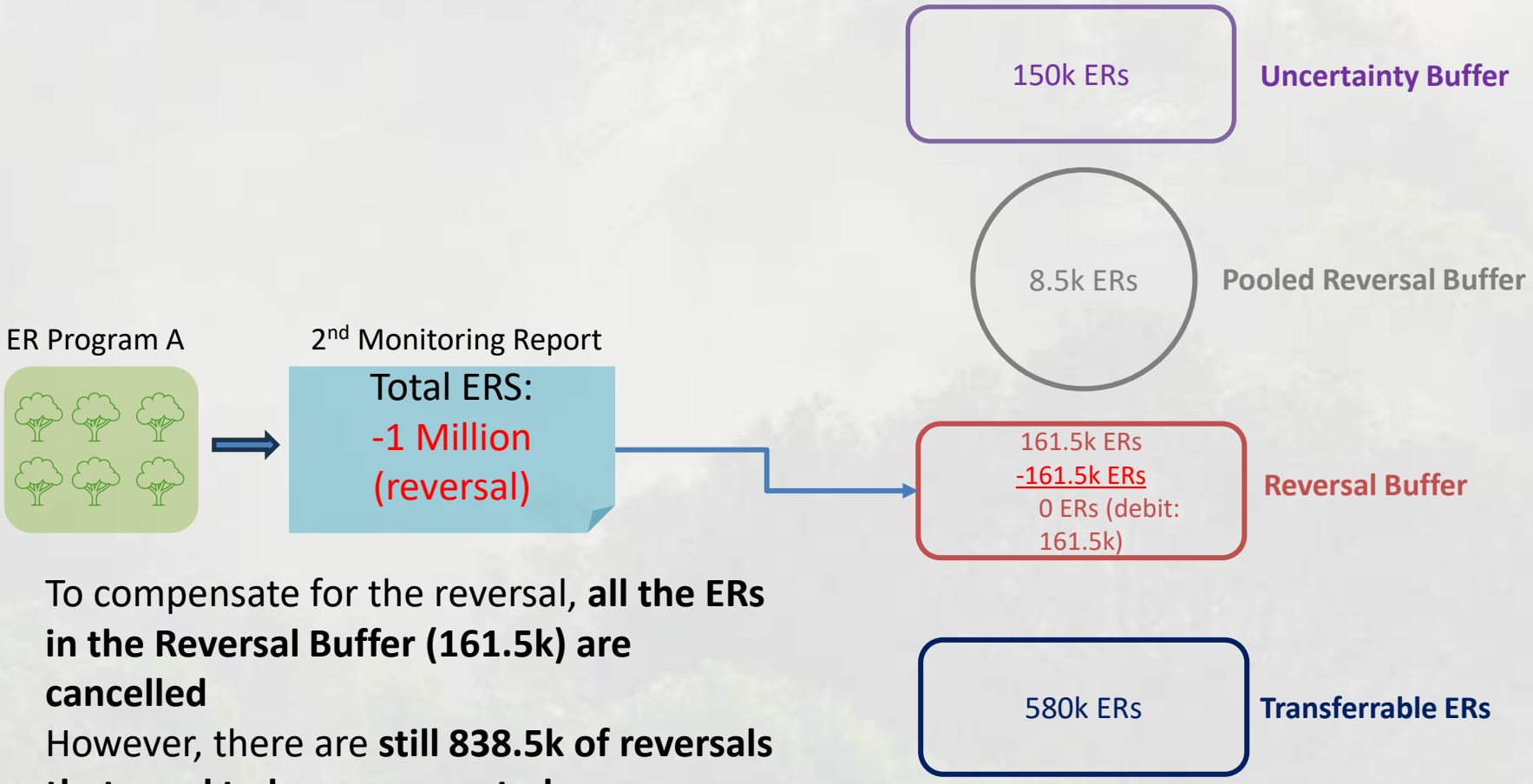
2nd Monitoring Report

Total ERS:
-1 Million
(reversal)

- In the second MP, the ER Program´s **emissions are higher than its Reference Level**
- By applying the equation contained in the BGL, the ER Program estimates that **the reversal amounts to 1 million ERs**
- Consequently, **no contributions are made to any of the buffers**

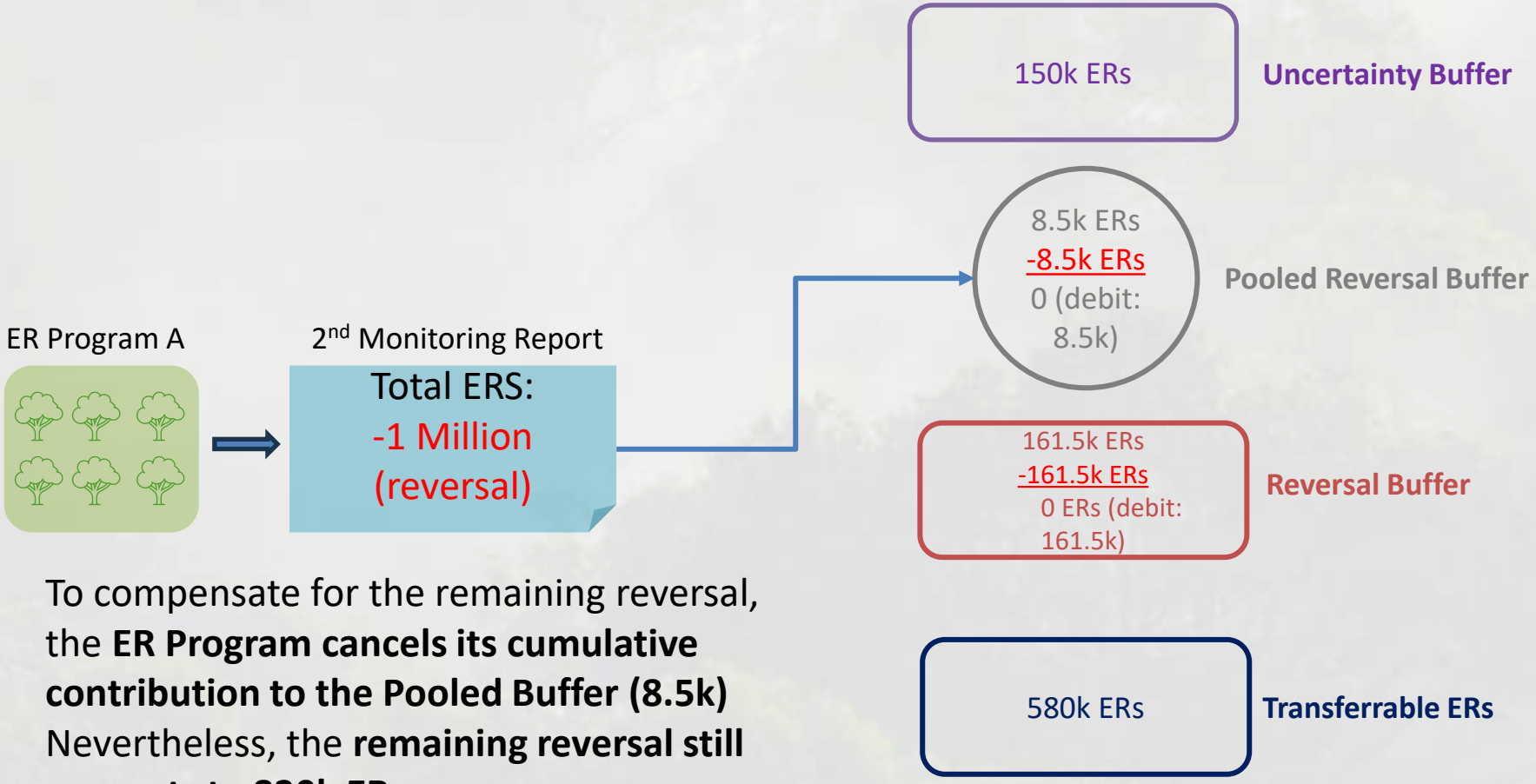


Year 2: the ER Program experiences a large reversal



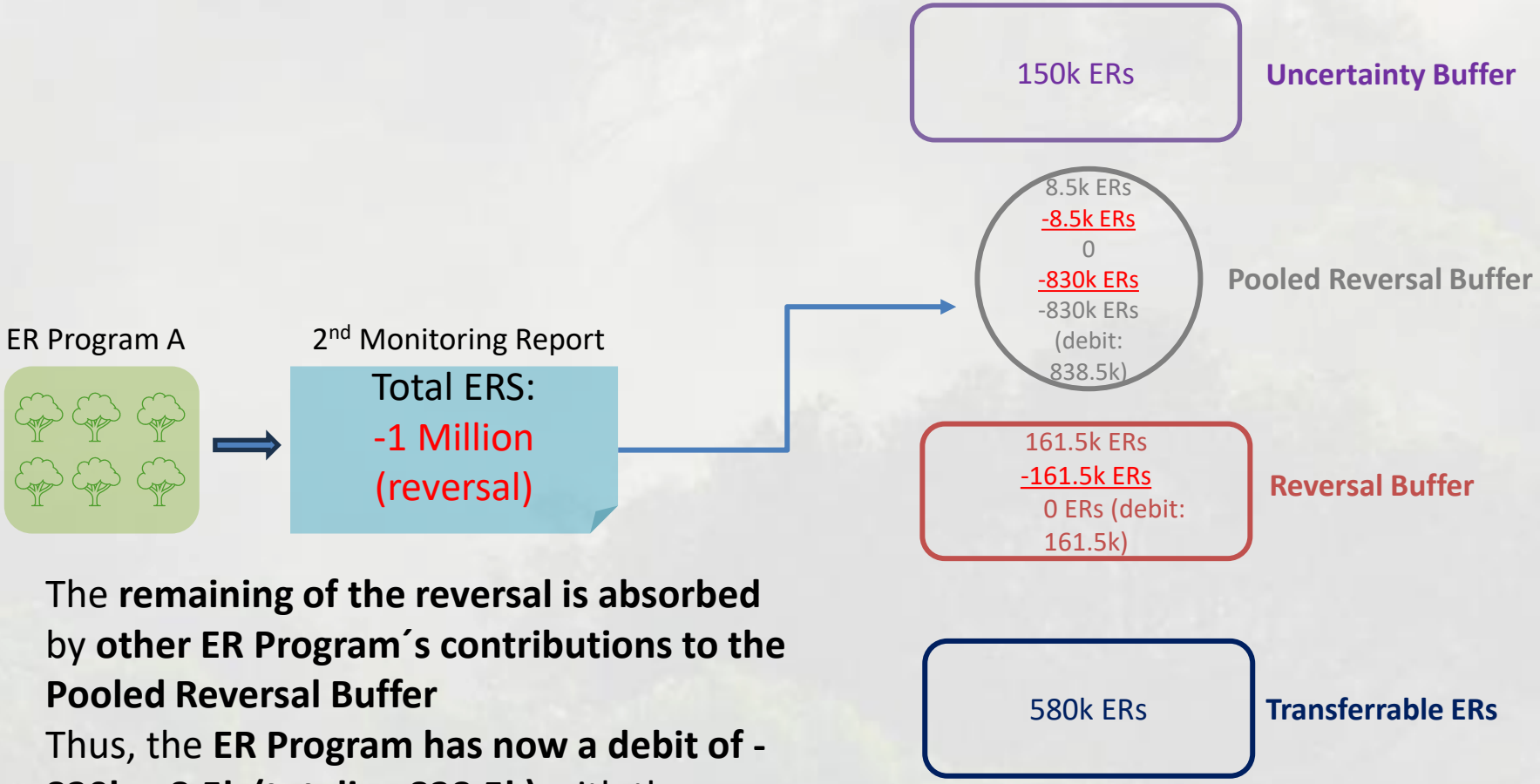
- To compensate for the reversal, **all the ERs in the Reversal Buffer (161.5k) are cancelled**
- However, there are **still 838.5k of reversals that need to be compensated**

Year 2: the ER Program experiences a large reversal



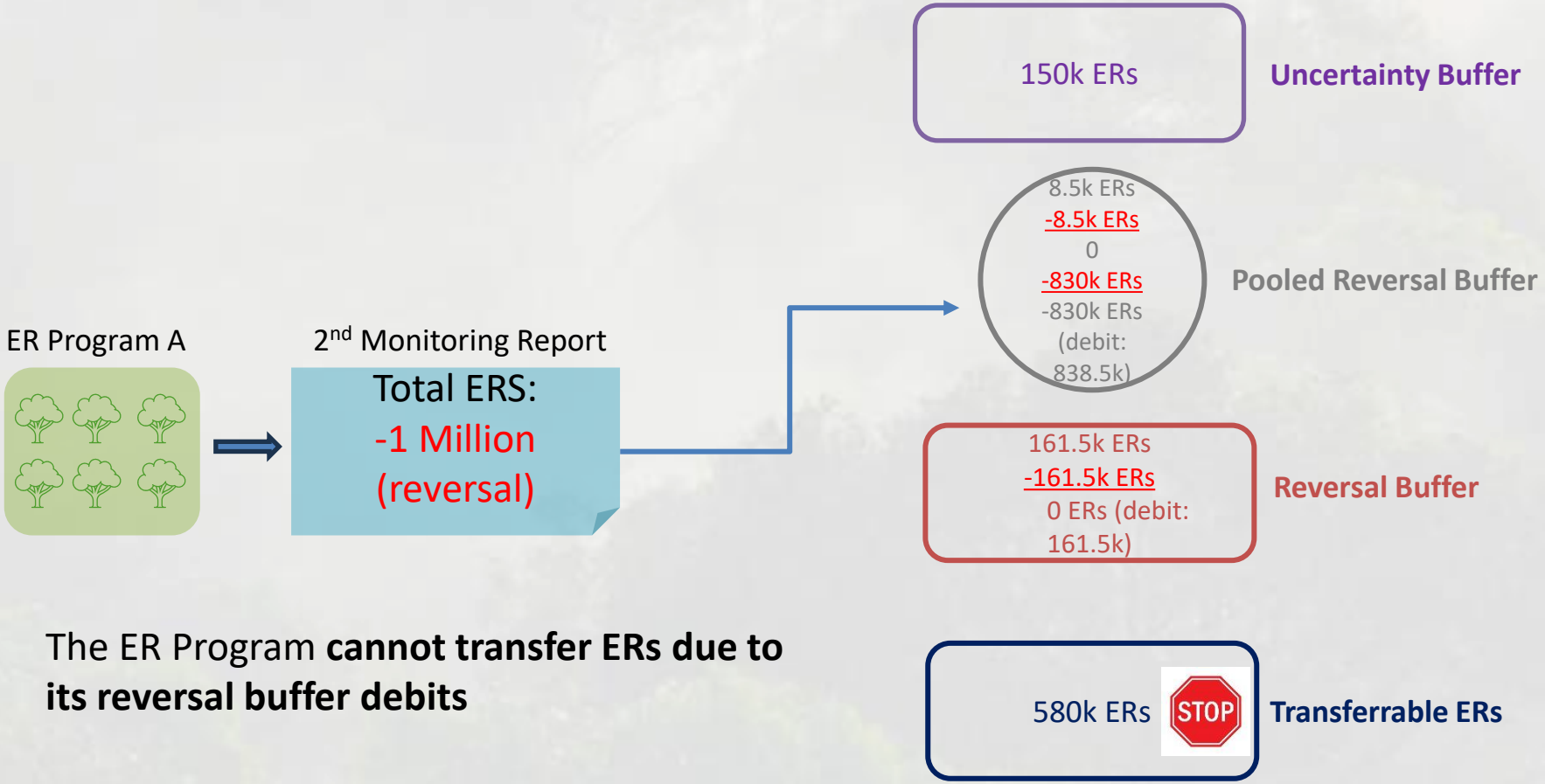
- To compensate for the remaining reversal, the **ER Program cancels its cumulative contribution to the Pooled Buffer (8.5k)**
- Nevertheless, the **remaining reversal still amounts to 830k ERs**

Year 2: the ER Program experiences a large reversal



- The **remaining of the reversal is absorbed** by **other ER Program´s contributions to the Pooled Reversal Buffer**
- Thus, the **ER Program has now a debit of -830k + 8.5k (totaling 838.5k)** with the **Pooled Reversal Buffer**

Year 2: the ER Program experiences a large reversal



- The ER Program **cannot transfer ERs due to its reversal buffer debits**

Year 3: the ER Program produces ERs again

ER Program A

3rd Monitoring Report

Total ERS: 500k

- In the third monitoring period, the ER Program **achieves 500k Total ERs**

150k ERs — **Uncertainty Buffer**

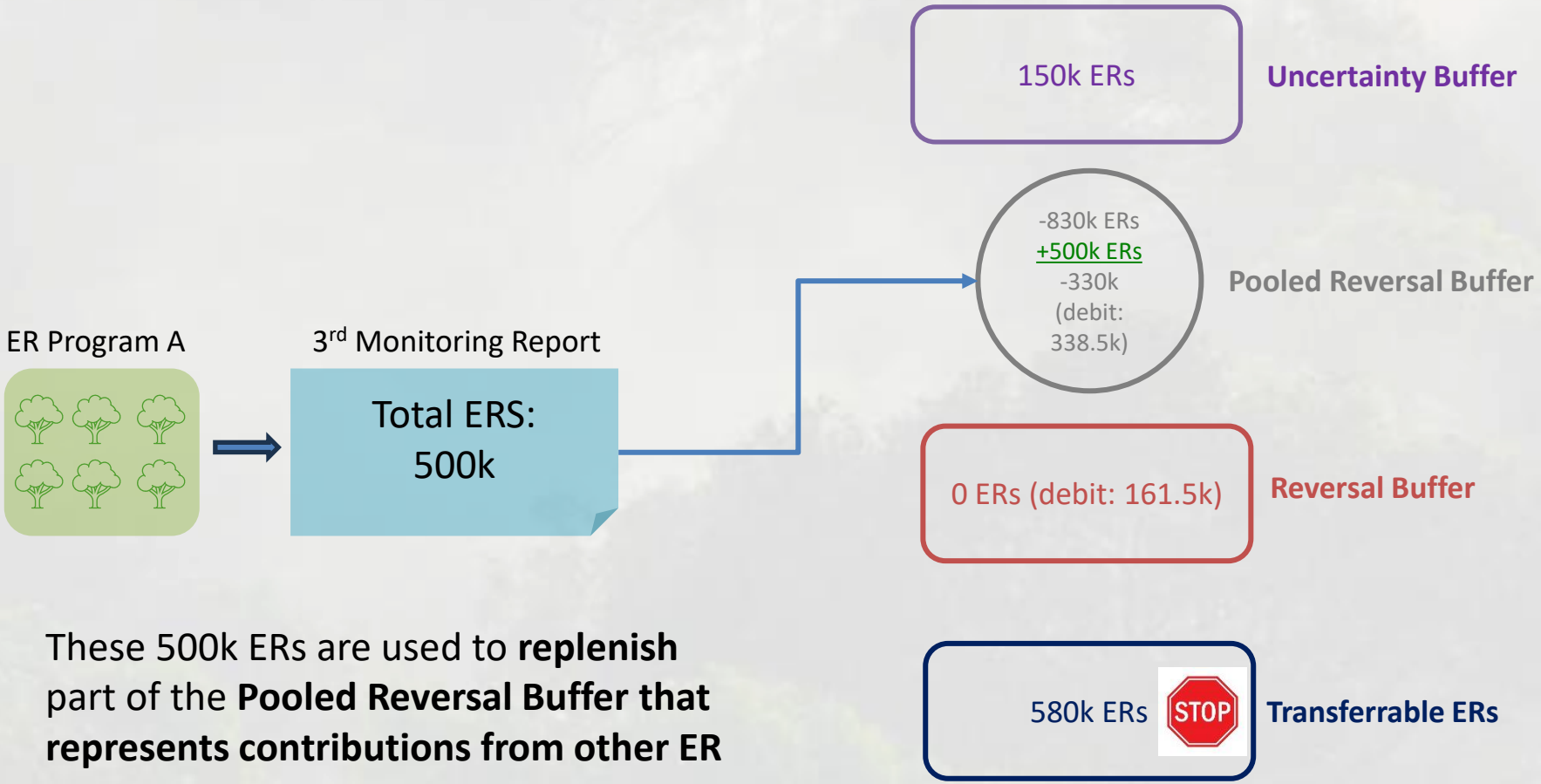
-830k ERs (debit: 838.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

580k ERs 

Transferrable ERs

Year 3: the ER Program produces ERs again



- These 500k ERs are used to **replenish** part of the **Pooled Reversal Buffer that represents contributions from other ER Programs**

Year 3: the ER Program produces ERs again

ER Program A

3rd Monitoring Report

Total ERS: 500k

150k ERs — **Uncertainty Buffer**

-830k ERs
+500k ERs
-330k
(debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

580k ERs 

Transferrable ERs

- The ER Program is **not able to transfer ERs until it covers the remaining debt** with the two reversal buffers

Year 4: the ER Program does not generate ERs, but improves its ER estimates

ER Program A

4th Monitoring Report

Total ERS:
0

- In the fourth monitoring period, the ER Program **achieves 0 Total ERs**, but it **reduces the aggregate uncertainty** of its ER **to 85%**

150k ERs — **Uncertainty Buffer**

-330k (debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

580k ERs 

Transferrable ERs

Year 4: the ER Program does not generate ERs, but improves its ER estimates

ER Program A

4th Monitoring Report

Total ERS:
0

150k ERs — **Uncertainty Buffer**

-330k (debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

580k ERs 

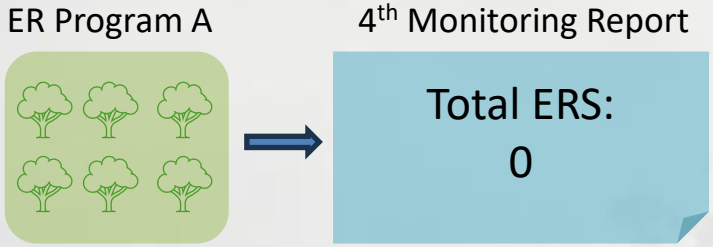
Transferrable ERs

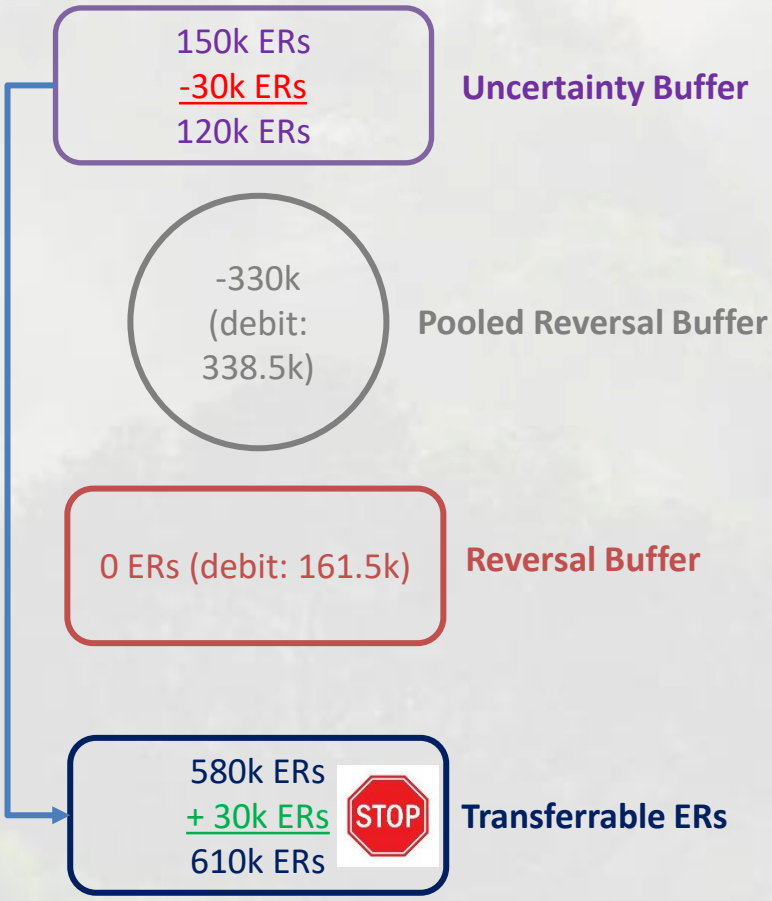
- Therefore, it is able to apply **a lower conservativeness factor (12%),** although the **cumulative ER estimates remain the same**

Table 1. Quantification Uncertainty Conservativeness Factors

Aggregate Uncertainty of ERs	Conservativeness Factor
≤ 15%	0%
> 15% and ≤ 30%	4%
> 30% and ≤ 60%	8%
> 60% and ≤ 100%	12%
> 100%	15%

Year 4: the ER Program does not generate ERs, but improves its ER estimates





- The ER Program is therefore **able to release 30k ERs from the Uncertainty Buffer (150k – 120k)**
- The **released ERs become transferrable ERs**, although the **ER Program cannot transfer them** due to its **reversal buffer debits**

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- In the fifth monitoring period, the ER Program **achieves 0 Total ERs**

120k ERs — **Uncertainty Buffer**

-330k (debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

610k ERs 

Transferrable ERs

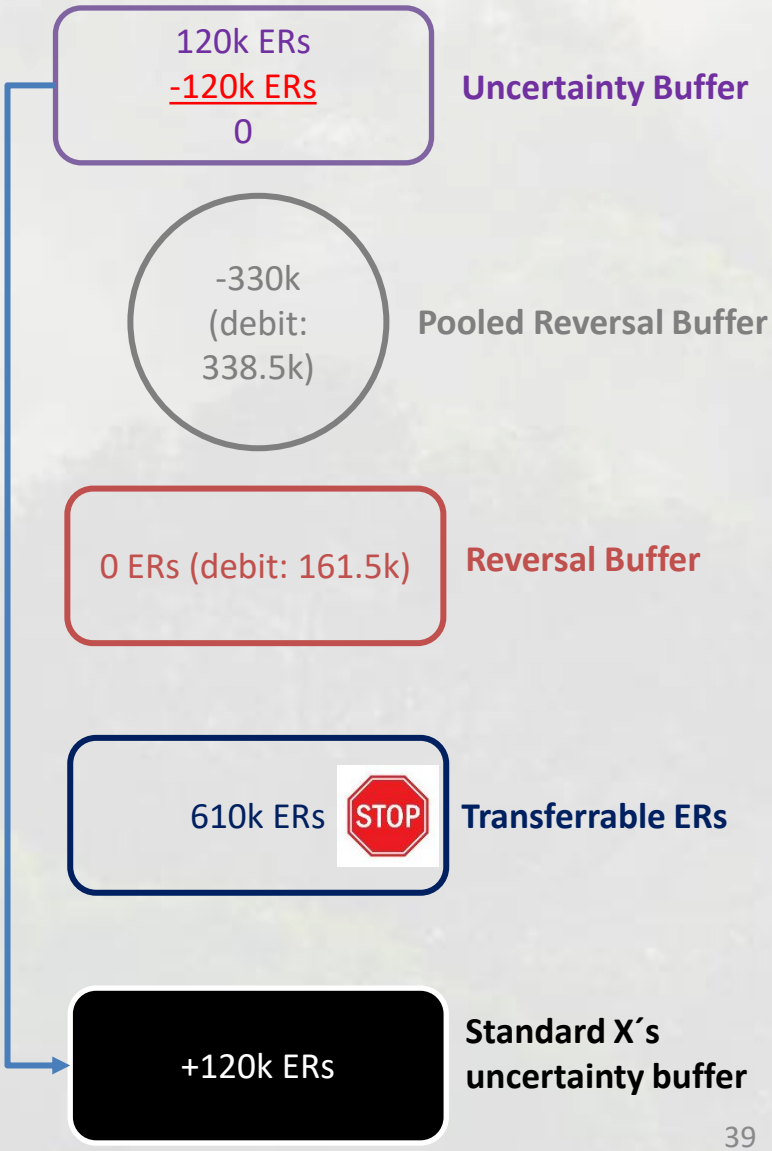
Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- Given that this is the **end of the Crediting Period**, the ER Program **transfers ERs from the Uncertainty Buffer to an equivalent buffer account outside the CF**



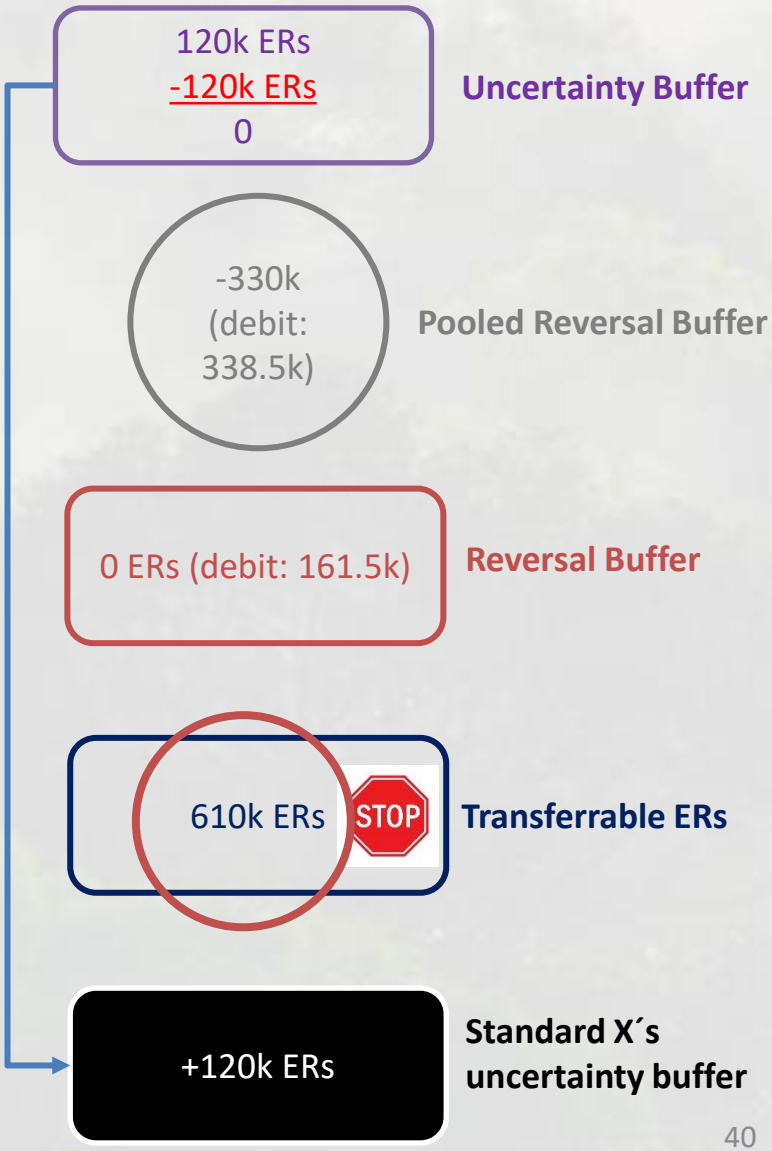
Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- At the same time, **even though the ER Program holds transferrable (excess) ERs**, it would **not be able to transfer them** because of its **reversal buffer debits**



How does the large reversal experienced by ER Program A affect other ER Programs?

Year 0: the ER Program´s ERPD is accepted and starts implementation

ER Program A

0 ERs

Reversal Buffer

ER Program B

0 ERs

Reversal Buffer

Pooled Reversal Buffer

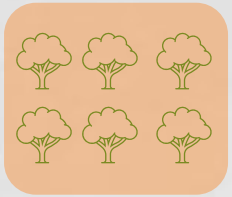
Program	Pooled Buffer ERs (k)
A	0
B	0
C	0
D	0
Balance	0

ER Program C

0 ERs

Reversal Buffer

ER Program D

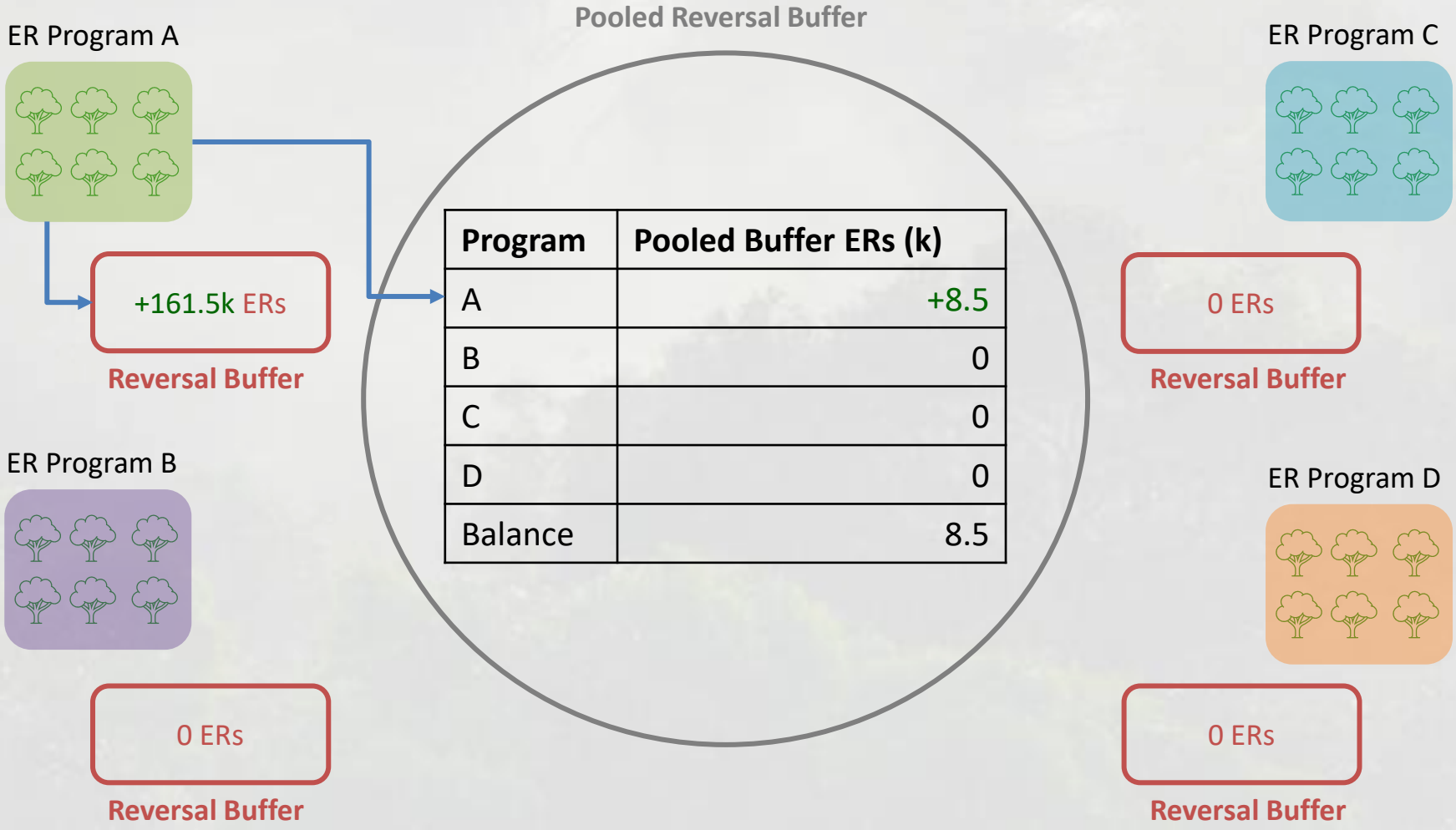


0 ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

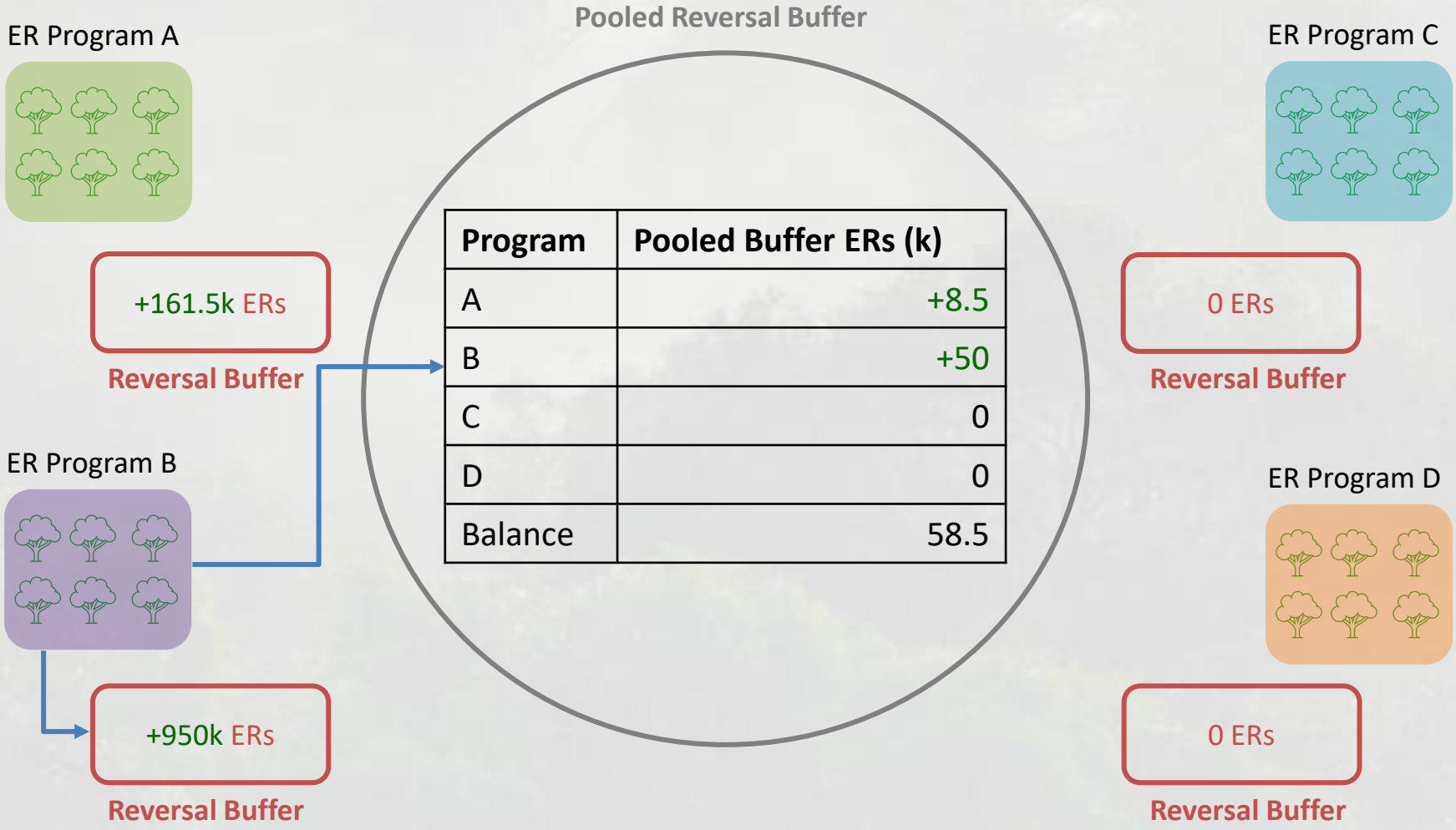
Year 1: the ER Program generates ERs



Program	Pooled Buffer ERs (k)
A	+8.5
B	0
C	0
D	0
Balance	8.5

How does the large reversal experienced by ER Program A affect other ER Programs?

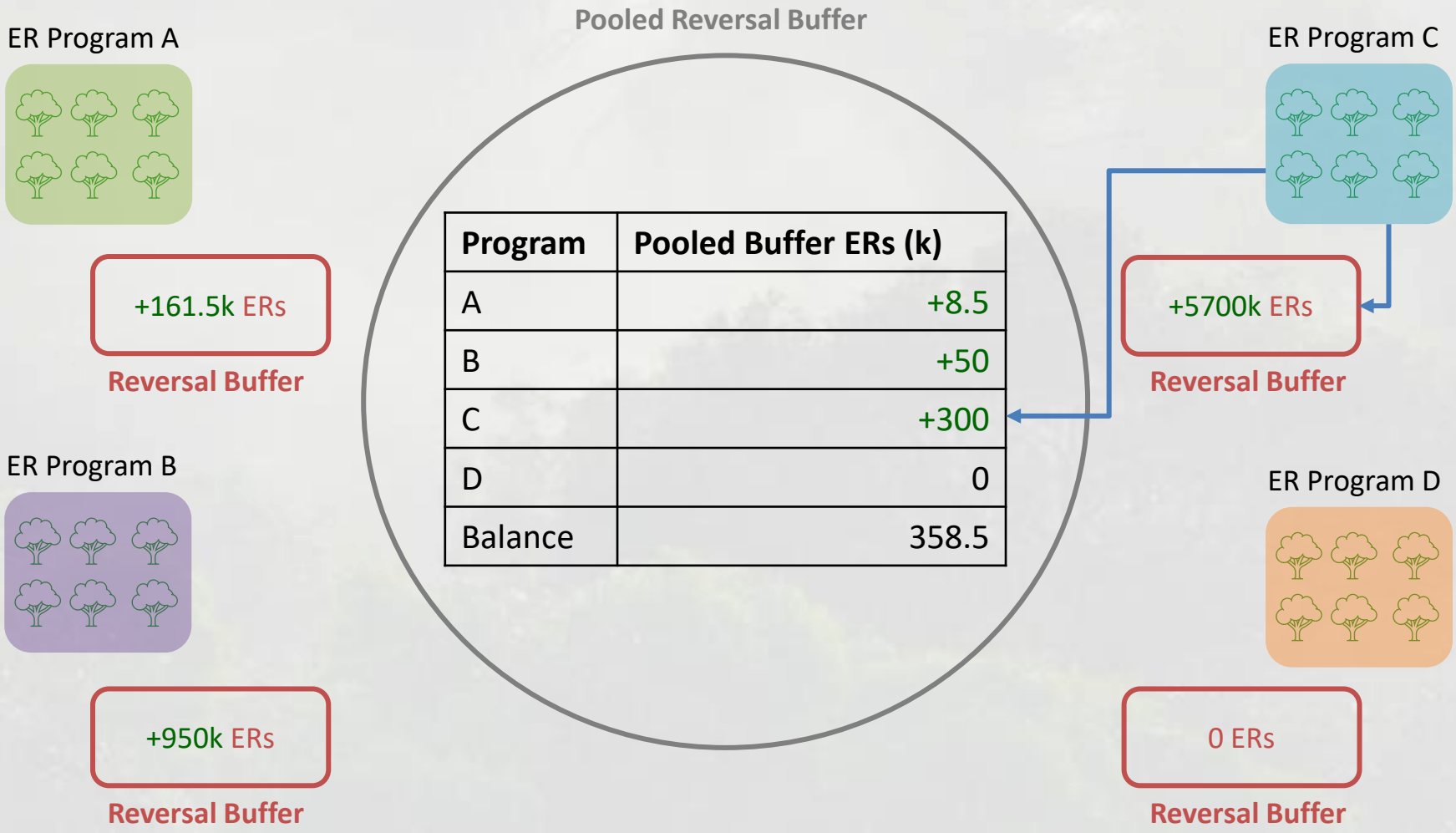
Year 1: the ER Program generates ERs



Program	Pooled Buffer ERs (k)
A	+8.5
B	+50
C	0
D	0
Balance	58.5

How does the large reversal experienced by ER Program A affect other ER Programs?

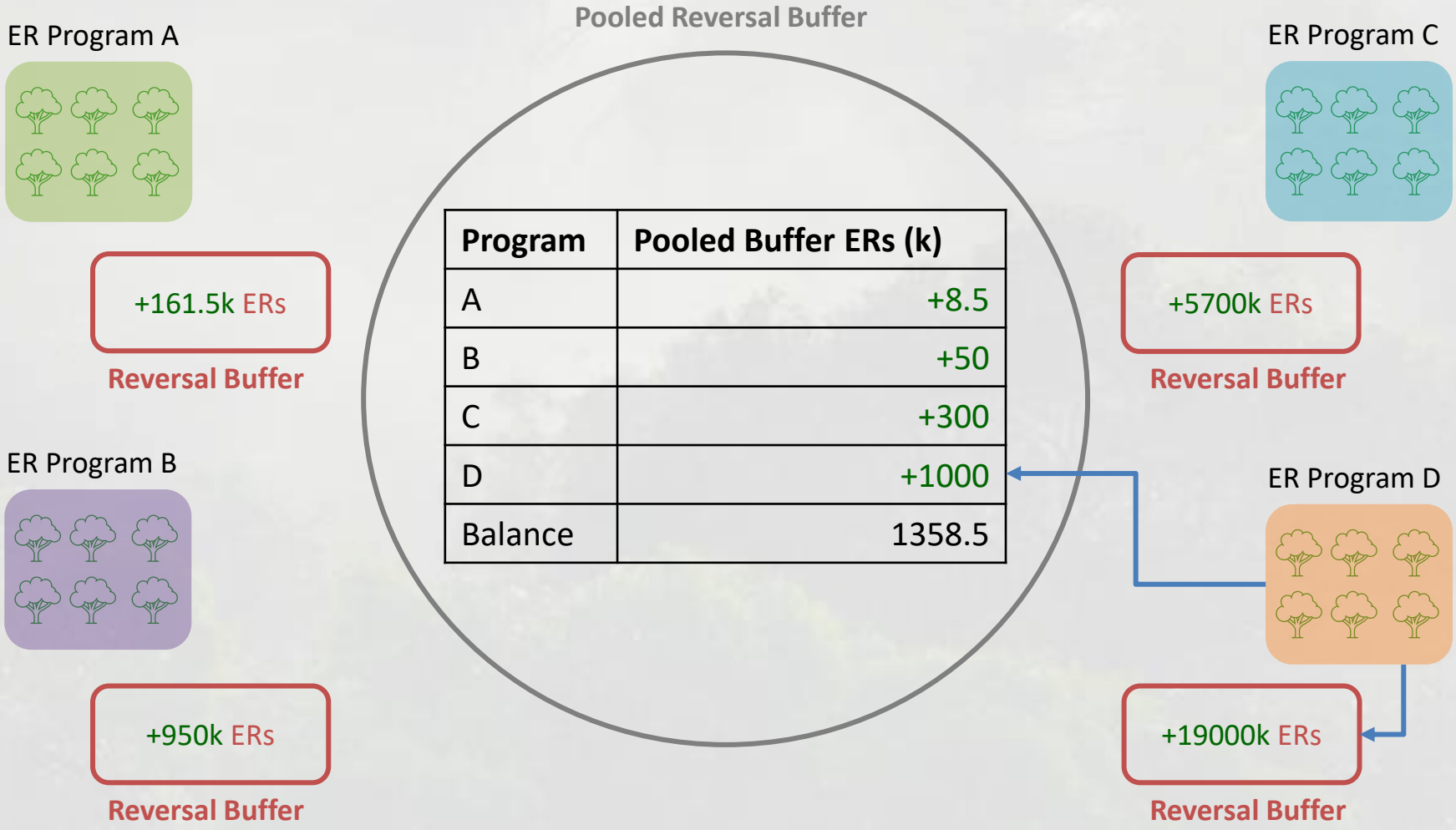
Year 1: the ER Program generates ERs



Program	Pooled Buffer ERs (k)
A	+8.5
B	+50
C	+300
D	0
Balance	358.5

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 1: the ER Program generates ERs



Program	Pooled Buffer ERs (k)
A	+8.5
B	+50
C	+300
D	+1000
Balance	1358.5

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 1: the ER Program generates ERs

ER Program A

161.5k ERs

Reversal Buffer

ER Program B

95k ERs

Reversal Buffer

Pooled Reversal Buffer

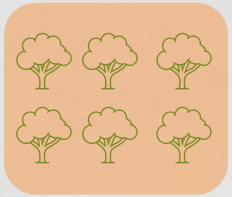
Program	Pooled Buffer ERs (k)
A	8.5
B	50
C	300
D	1000
Balance	1358.5

ER Program C

57k ERs

Reversal Buffer

ER Program D

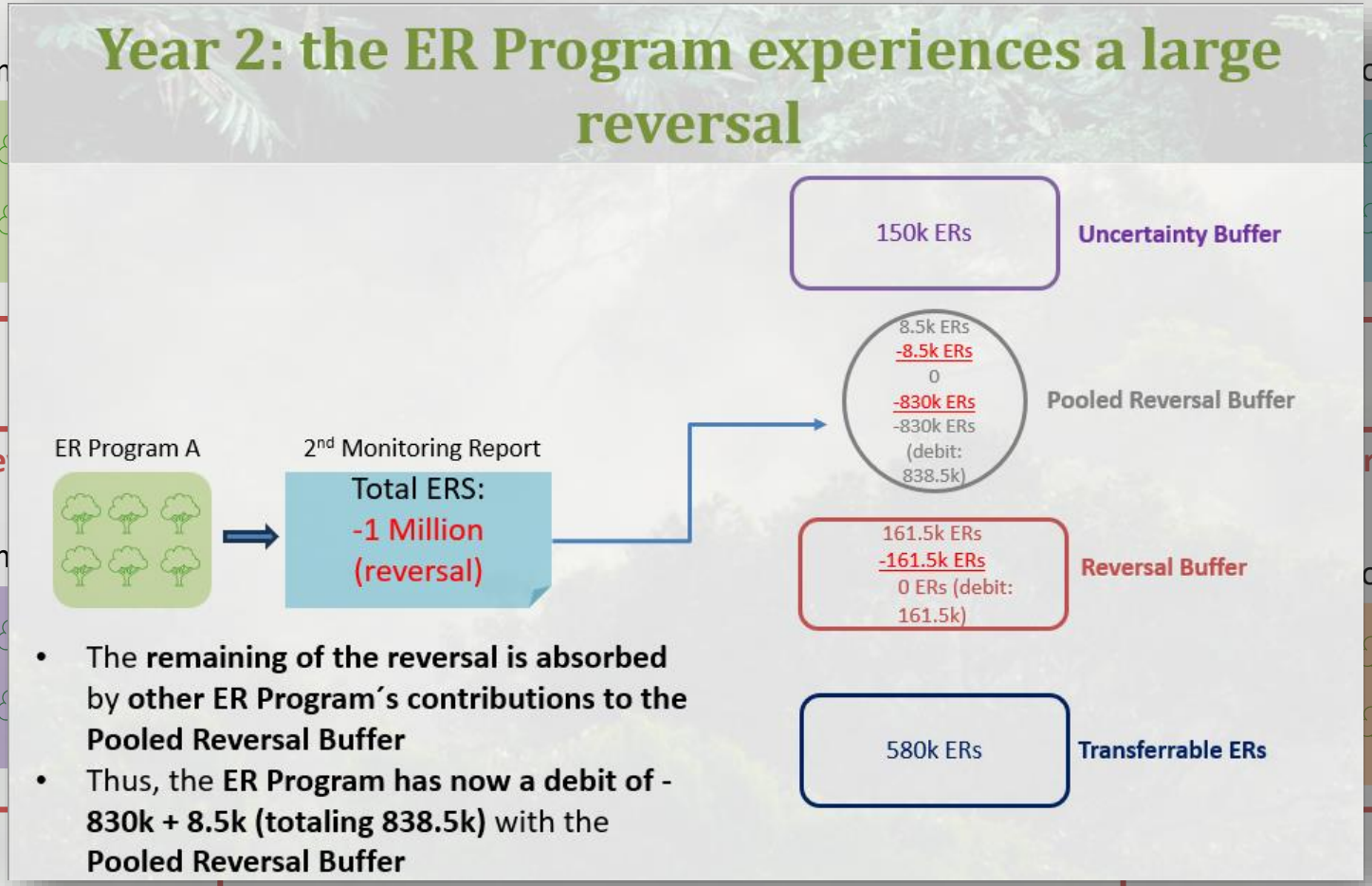


190k ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 2: the ER Program experiences a large reversal



ogram C

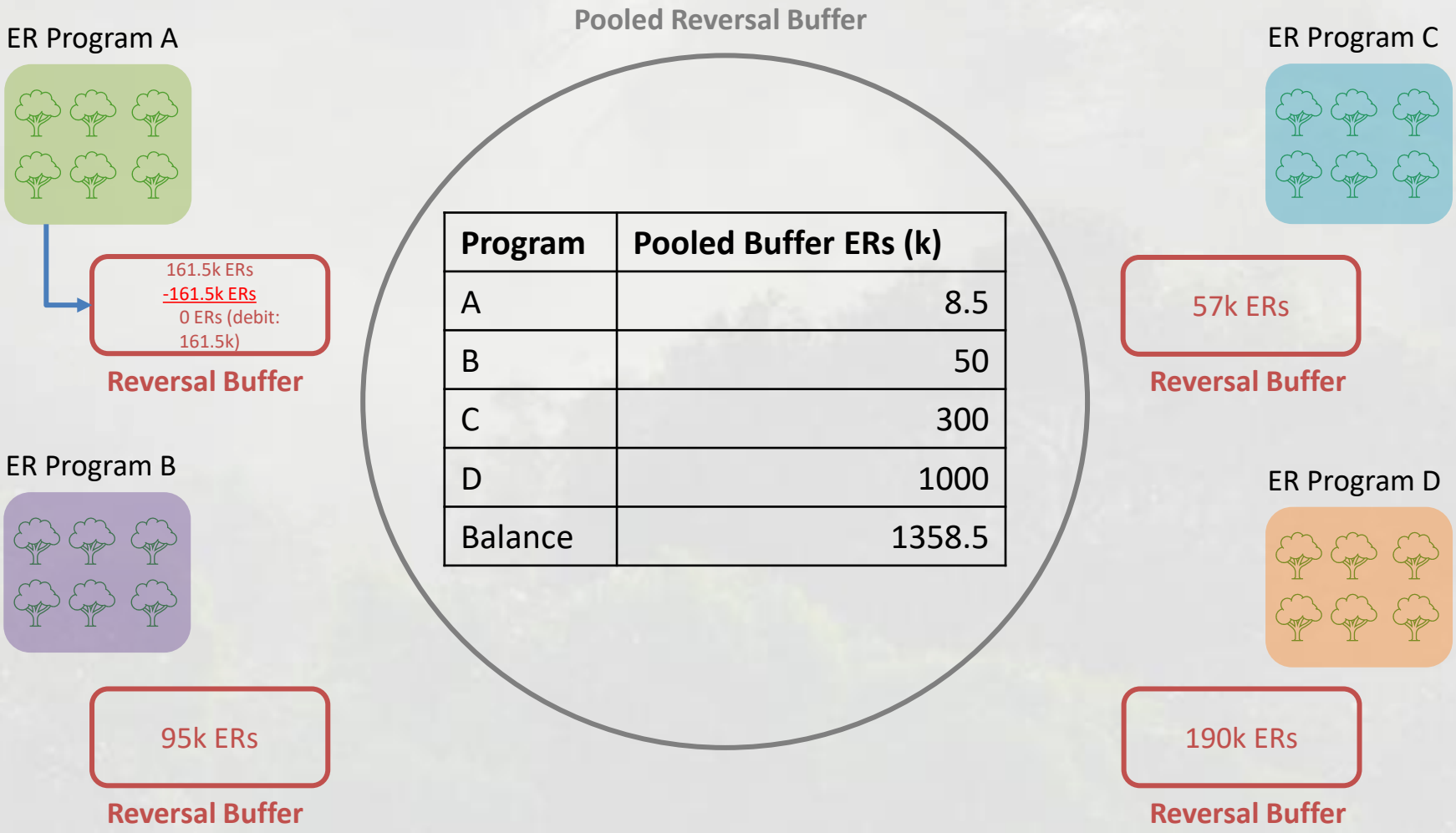
ogram D

Reversal Buffer

Reversal Buffer

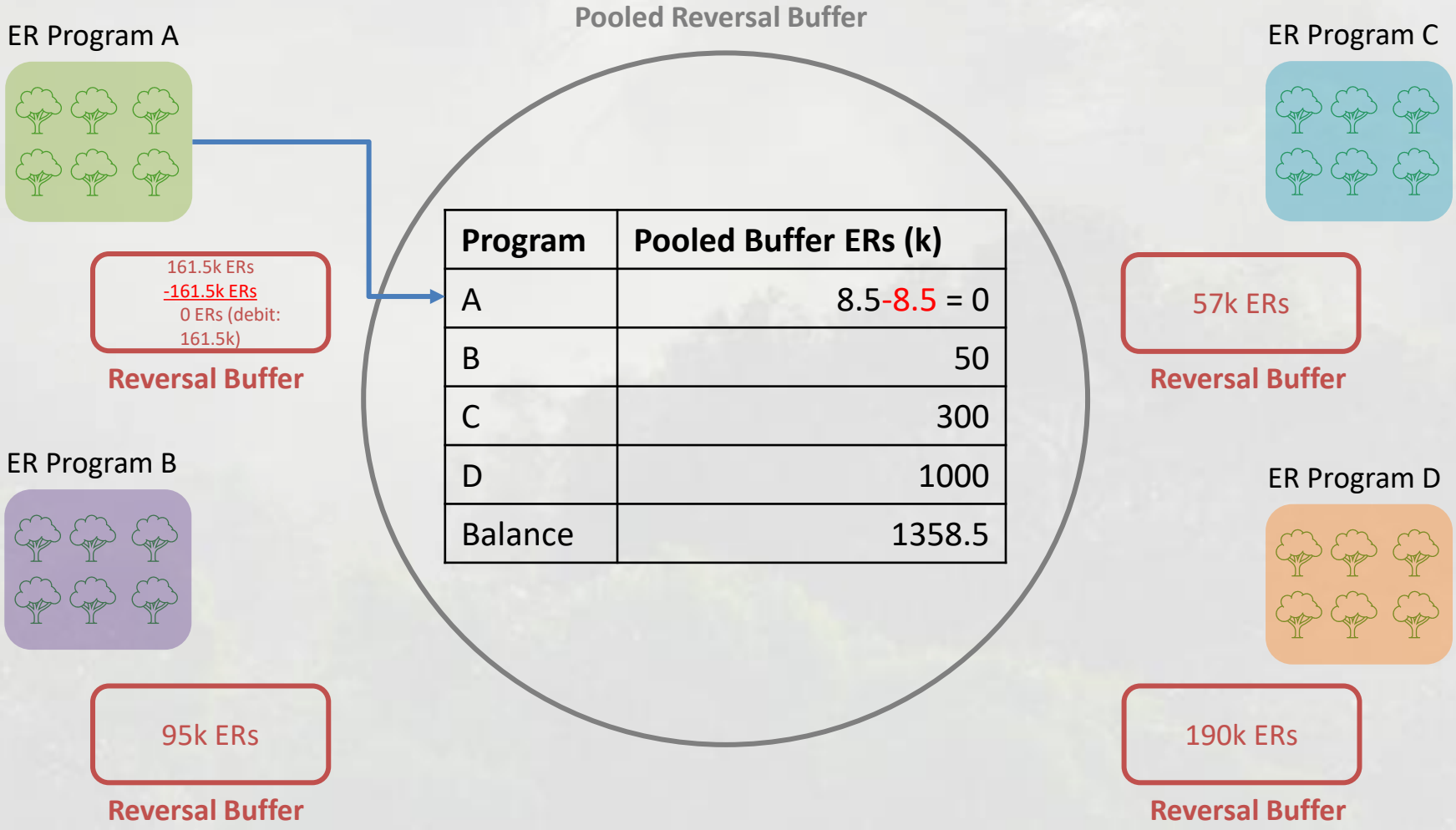
How does the large reversal experienced by ER Program A affect other ER Programs?

Year 2: the ER Program experiences a large reversal



How does the large reversal experienced by ER Program A affect other ER Programs?

Year 2: the ER Program experiences a large reversal



Program	Pooled Buffer ERs (k)
A	8.5-8.5 = 0
B	50
C	300
D	1000
Balance	1358.5

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 2: the ER Program experiences a large

Pooled Reversal Buffer

ER Program A

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

95k ERs

Reversal Buffer

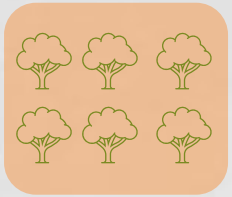
8.5k ERs
-8.5k ERs
0
-830k ERs
-830k ERs (debit: 838.5k)

am C

10.8 If the amount of Buffer ERs in the Reversal Buffer account does not suffice to fully compensate for the Reversal, then the shortfall amount of Buffer ERs in the Reversal Buffer account shall be covered through an equivalent amount of Buffer ERs from the Pooled Reversal Buffer.[5] In this case, the World Bank shall instruct the Buffer Manager(s) to cancel Buffer ERs from each ER Program's Pooled Reversal Buffer account on a pro-rata basis. Buffer ERs shall be canceled by removing them from the Pooled Reversal Buffer account, and permanently retiring their associated serial numbers.

D	1000
Balance	1358.5

ER Program D



190k ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 2: the ER Program experiences a large reversal

ER Program A

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

95k ERs

Reversal Buffer

Pooled Reversal Buffer

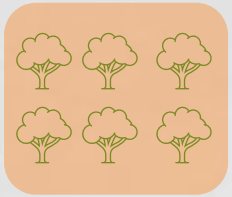
Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50	4
C	300	22
D	1000	74
Balance	1358.5	100

ER Program C

57k ERs

Reversal Buffer

ER Program D

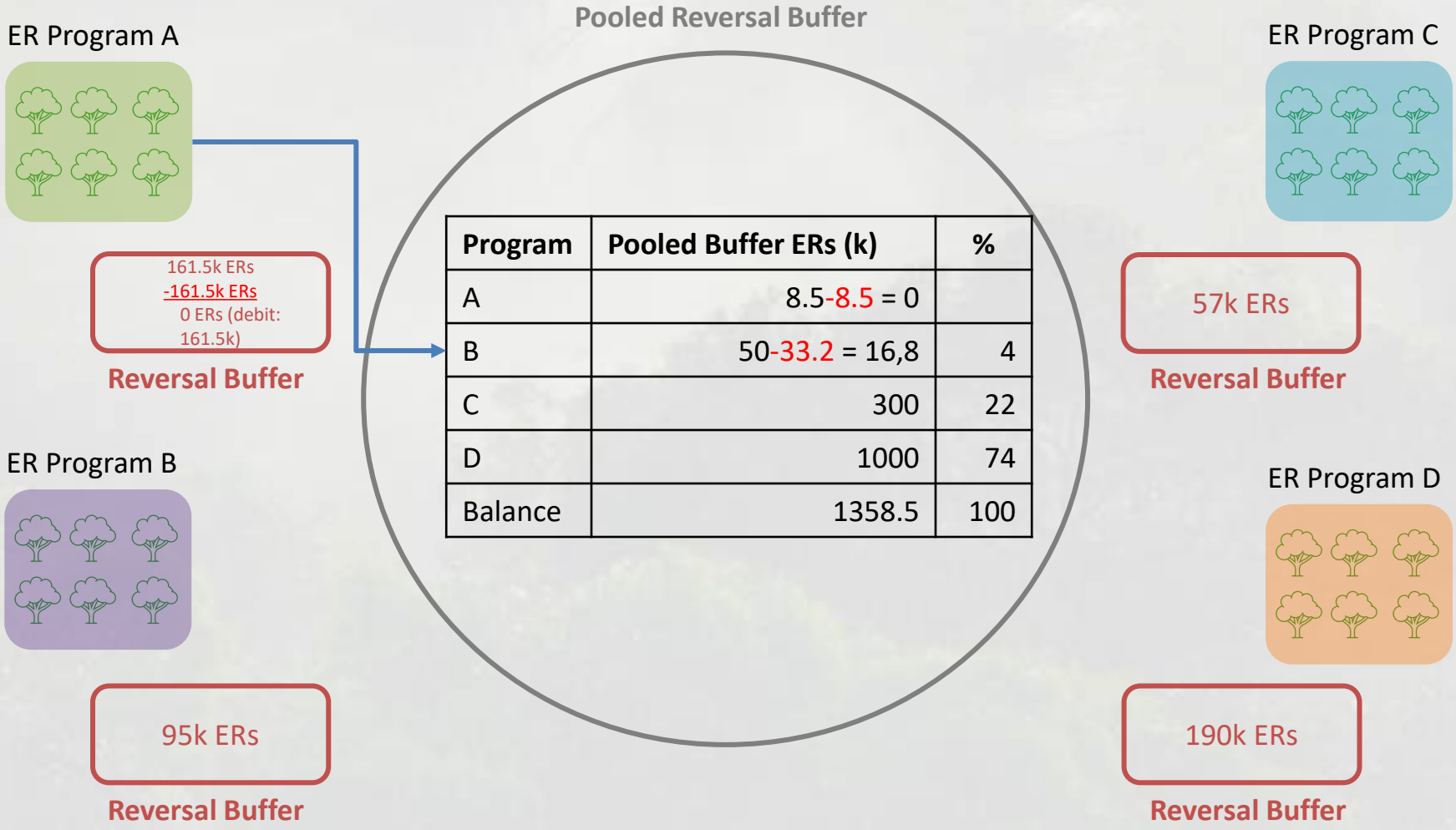


190k ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

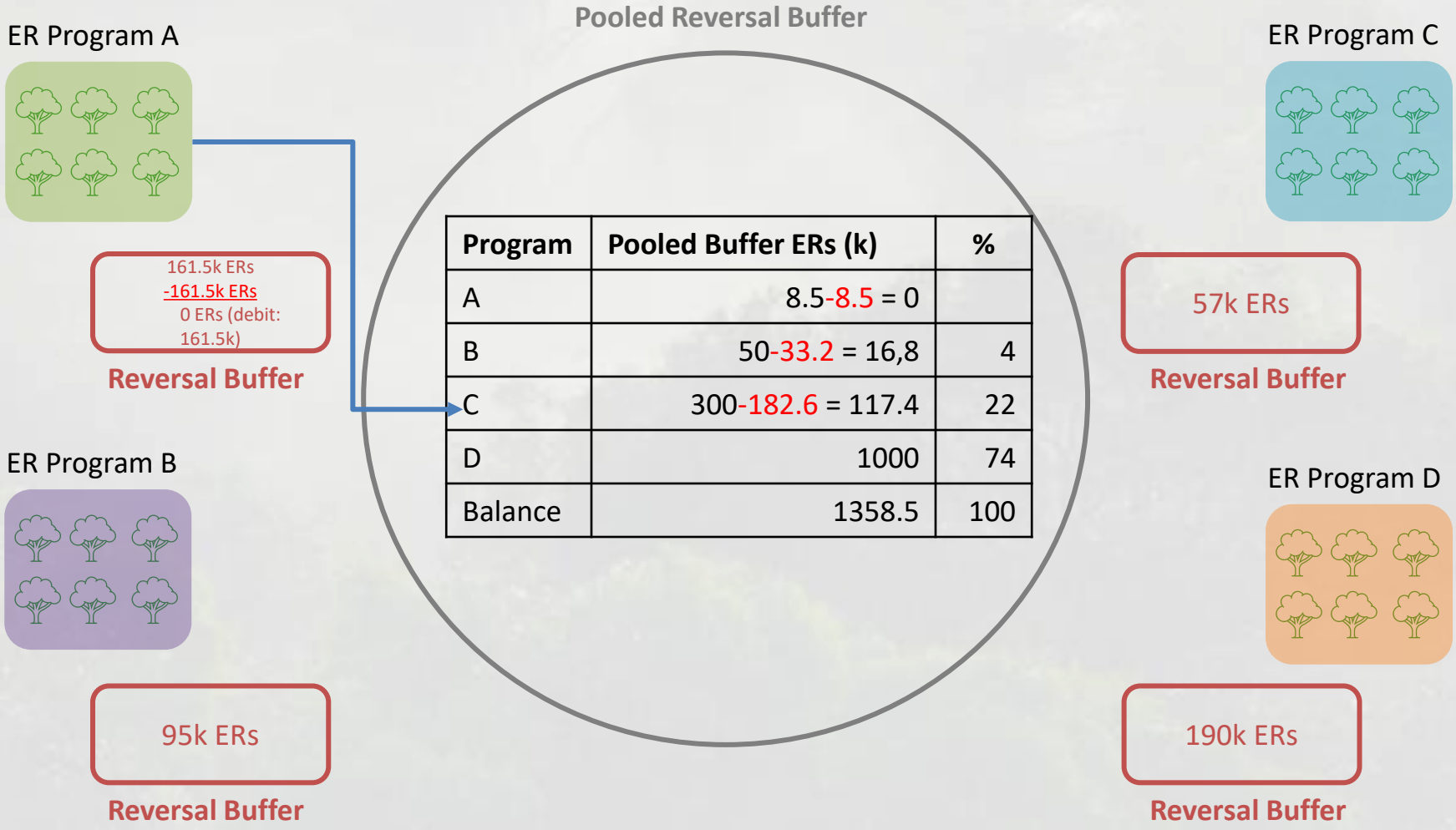
Year 2: the ER Program experiences a large reversal



Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2 = 16,8	4
C	300	22
D	1000	74
Balance	1358.5	100

How does the large reversal experienced by ER Program A affect other ER Programs?

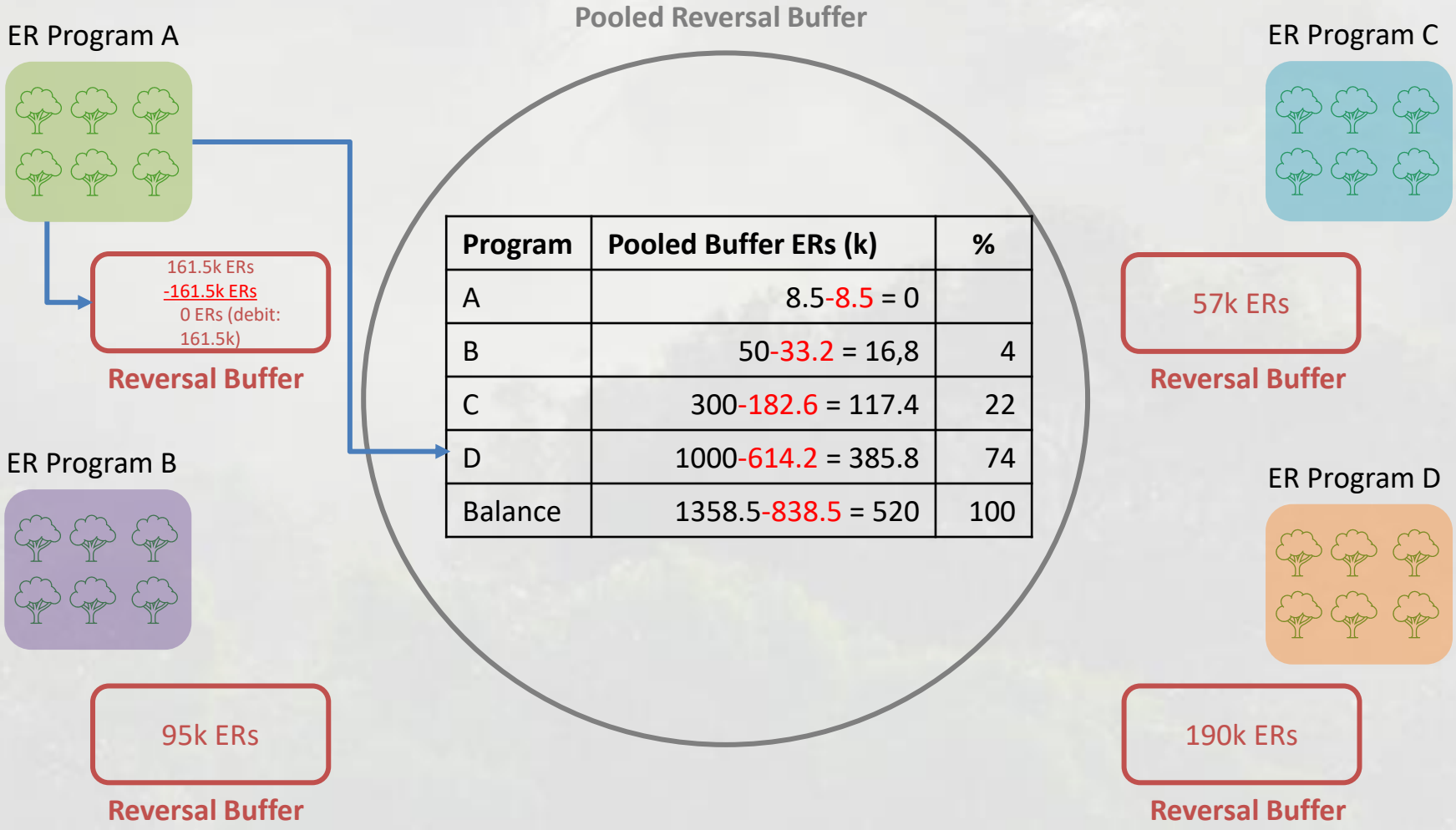
Year 2: the ER Program experiences a large reversal



Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2 = 16,8	4
C	300-182.6 = 117.4	22
D	1000	74
Balance	1358.5	100

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 2: the ER Program experiences a large reversal



Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2 = 16,8	4
C	300-182.6 = 117.4	22
D	1000-614.2 = 385.8	74
Balance	1358.5-838.5 = 520	100

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 3: the ER Program produces ERs again

ER Program A

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

95k ERs

Reversal Buffer

Pooled Reversal Buffer

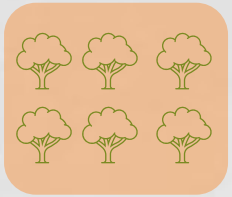
Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2 = 16,8	4
C	300-182.6 = 117.4	22
D	1000-614.2 = 385.8	74
Balance	1358.5-838.5 = 520	100

ER Program C

57k ERs

Reversal Buffer

ER Program D

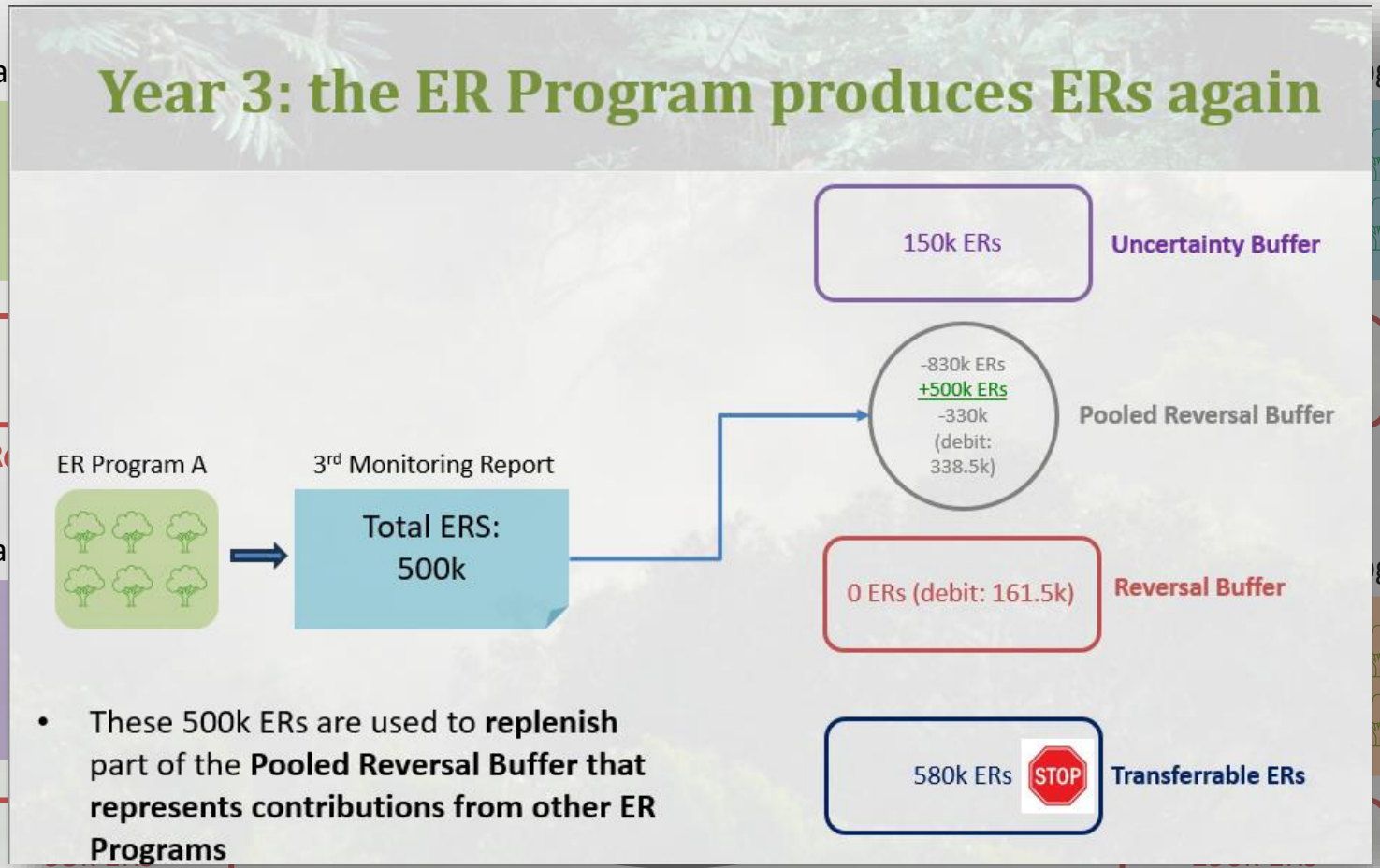


190k ERs

Reversal Buffer

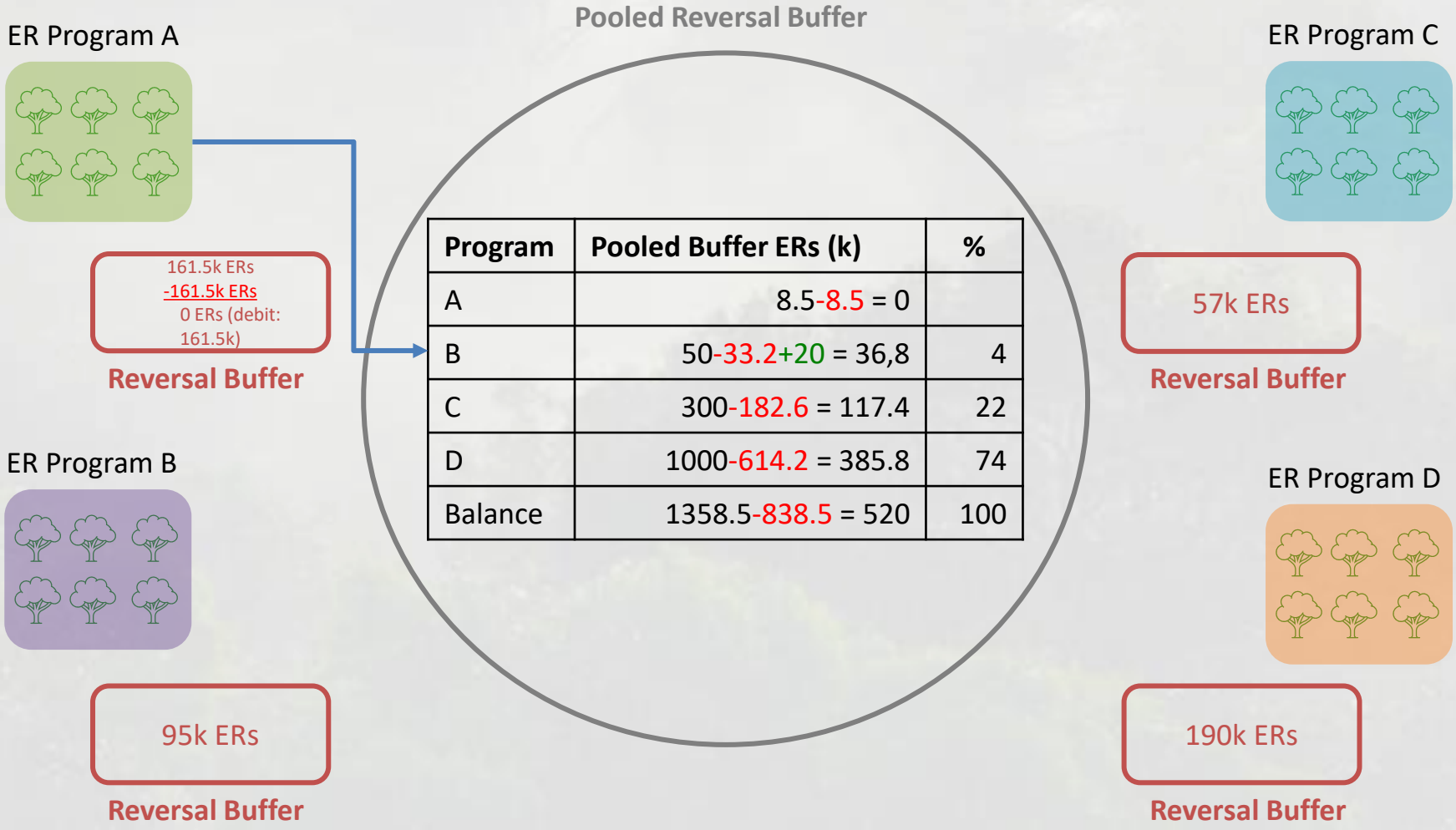
How does the large reversal experienced by ER Program A affect other ER Programs?

Year 3: the ER Program produces ERs again



How does the large reversal experienced by ER Program A affect other ER Programs?

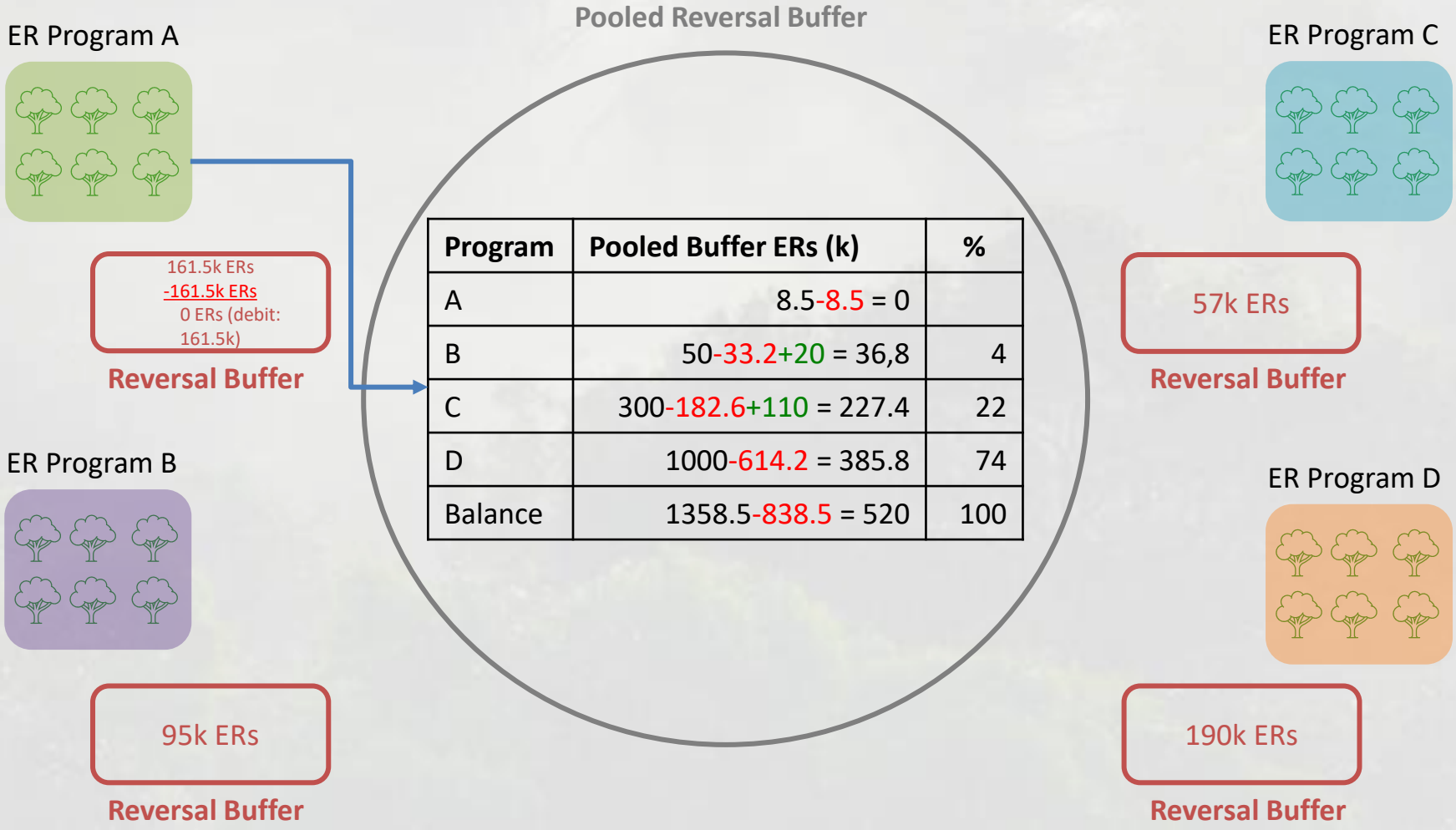
Year 3: the ER Program produces ERs again



Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6 = 117.4	22
D	1000-614.2 = 385.8	74
Balance	1358.5-838.5 = 520	100

How does the large reversal experienced by ER Program A affect other ER Programs?

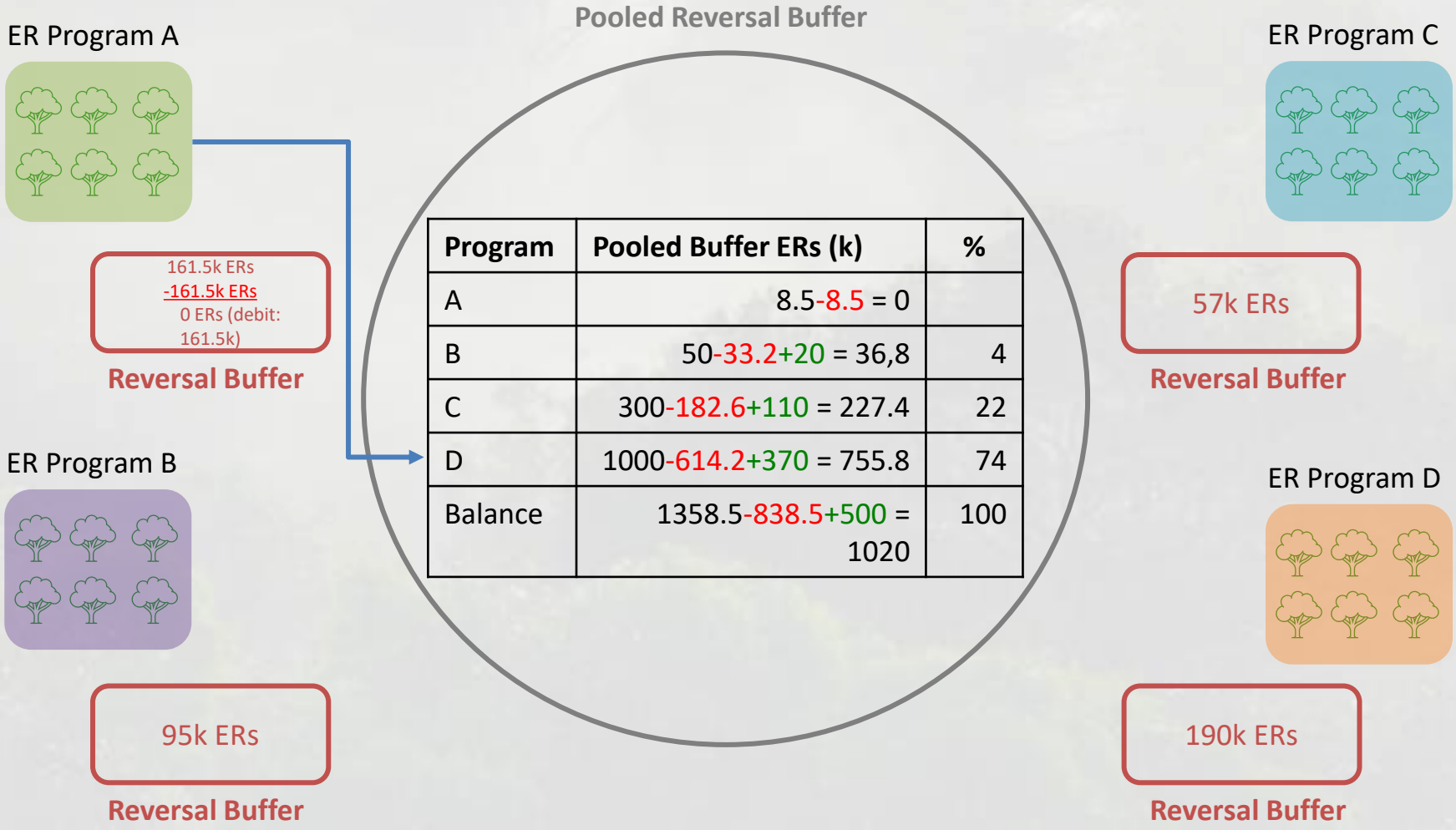
Year 3: the ER Program produces ERs again



Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6+110 = 227.4	22
D	1000-614.2 = 385.8	74
Balance	1358.5-838.5 = 520	100

How does the large reversal experienced by ER Program A affect other ER Programs?

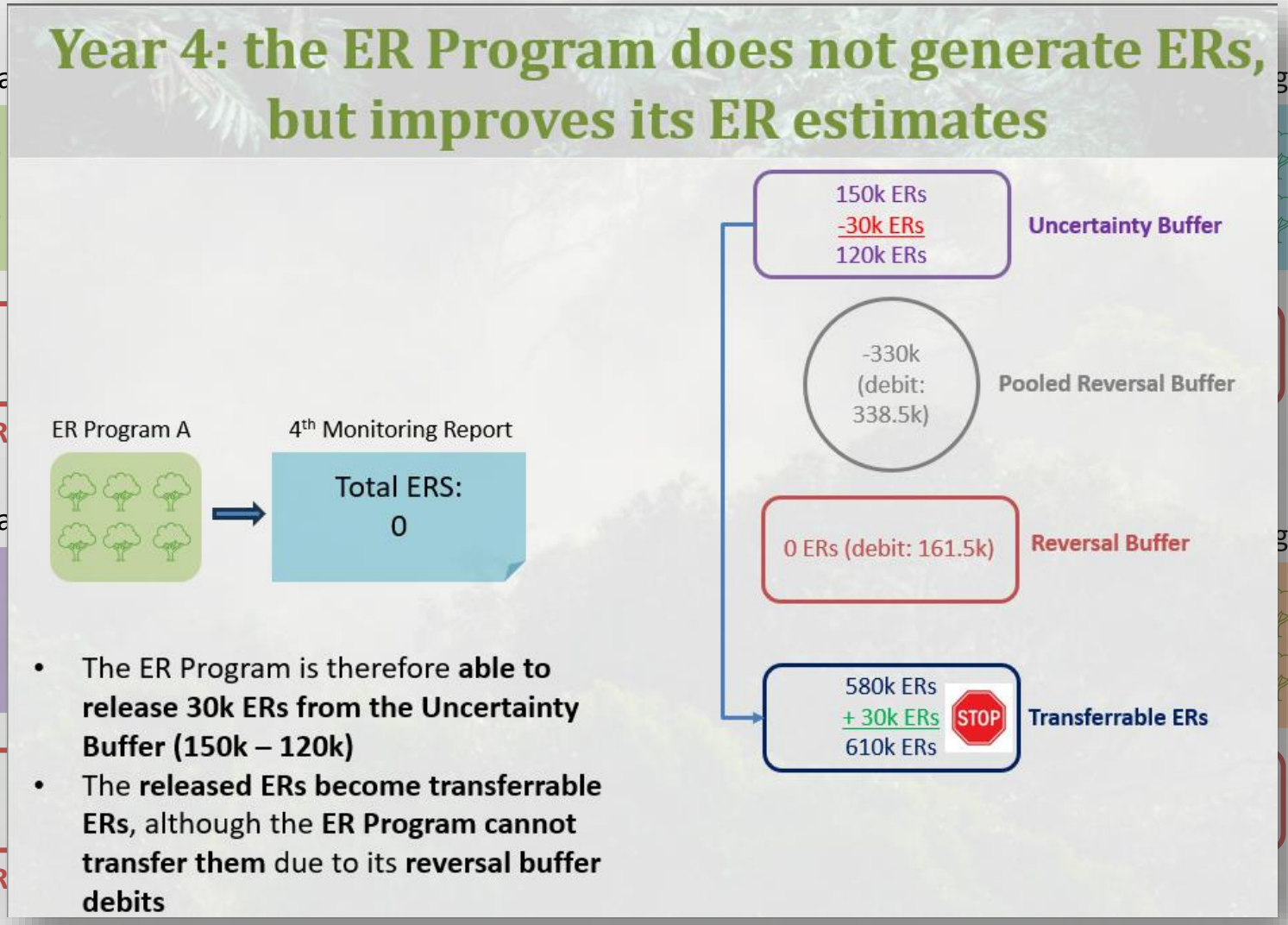
Year 3: the ER Program produces ERs again



Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6+110 = 227.4	22
D	1000-614.2+370 = 755.8	74
Balance	1358.5-838.5+500 = 1020	100

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 4: the ER Program does not generate ERs, but improves its ER estimates



How does the large reversal experienced by ER Program A affect other ER Programs?

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

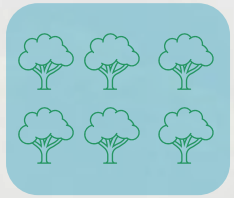
95k ERs

Reversal Buffer

Pooled Reversal Buffer

Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6+110 = 227.4	22
D	1000-614.2+370 = 755.8	74
Balance	1358.5-838.5+500 = 1020	100

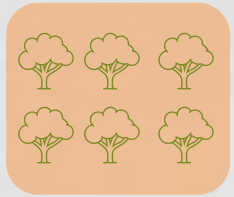
ER Program C



57k ERs

Reversal Buffer

ER Program D

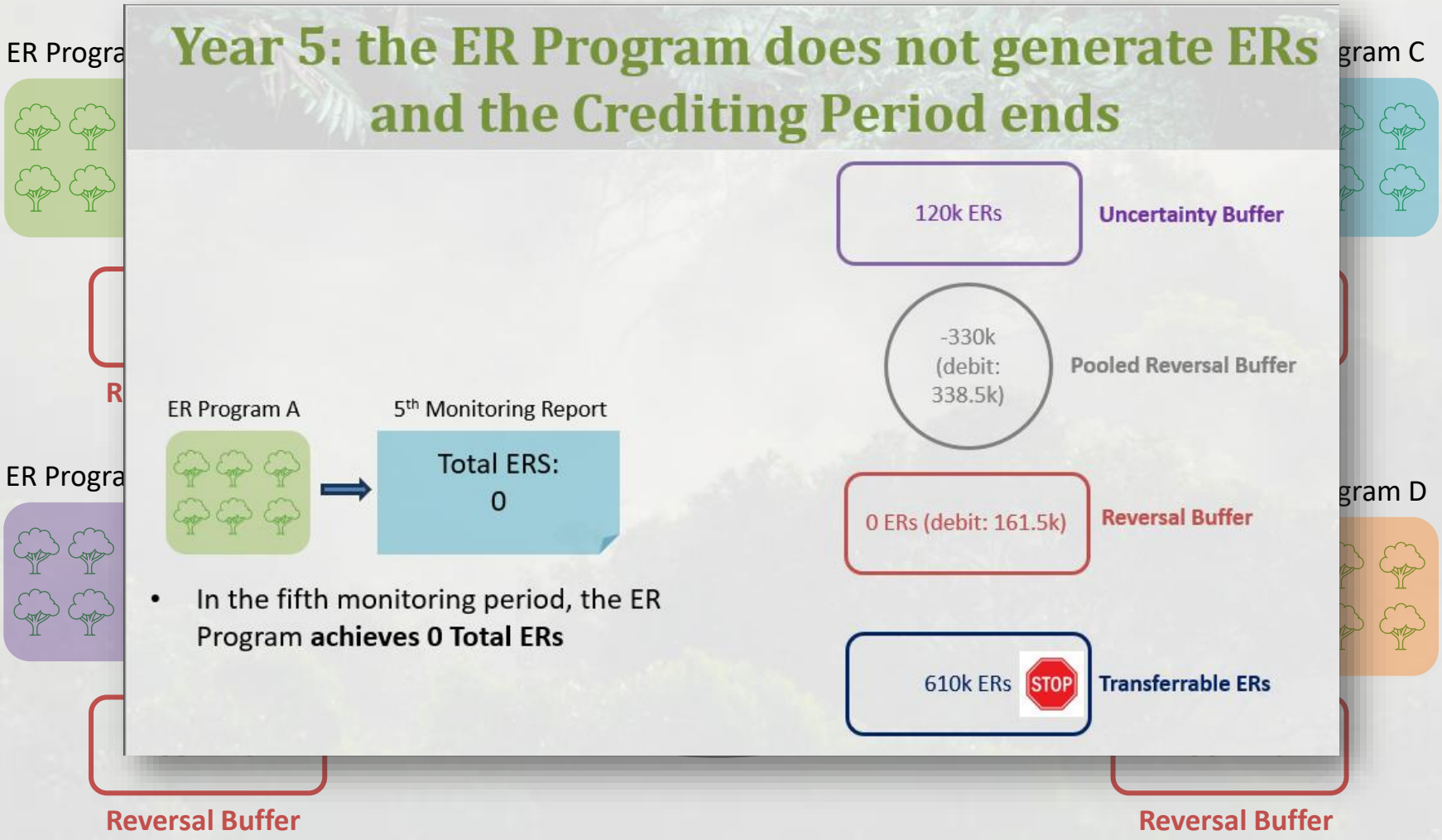


190k ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 5: the ER Program does not generate ERs and the Crediting Period ends



How does the large reversal experienced by ER Program A affect other ER Programs?

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

Pooled Reversal Buffer debit: 338.5k

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

95k ERs

Reversal Buffer

Pooled Reversal Buffer

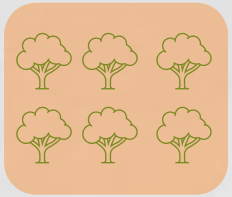
Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6+110 = 227.4	22
D	1000-614.2+370 = 755.8	74
Balance	1358.5-838.5+500 = 1020	100

ER Program C

57k ERs

Reversal Buffer

ER Program D



190k ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

Pooled Reversal Buffer debit: 338.5k

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

Pooled Reversal Buffer loss: -13.2k

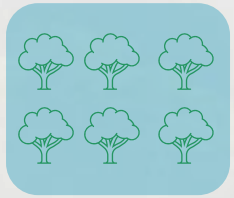
95k ERs

Reversal Buffer

Pooled Reversal Buffer

Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6+110 = 227.4	22
D	1000-614.2+370 = 755.8	74
Balance	1358.5-838.5+500 = 1020	100

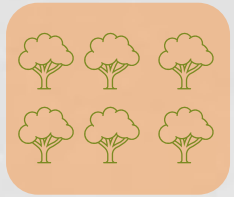
ER Program C



57k ERs

Reversal Buffer

ER Program D



190k ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

Pooled Reversal Buffer debit: 338.5k

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

Pooled Reversal Buffer loss: -13.2k

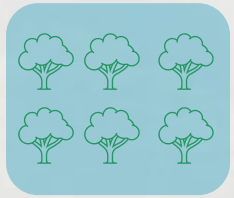
95k ERs

Reversal Buffer

Pooled Reversal Buffer

Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6+110 = 227.4	22
D	1000-614.2+370 = 755.8	74
Balance	1358.5-838.5+500 = 1020	100

ER Program C

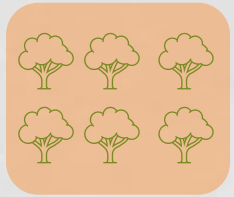


Pooled Reversal Buffer loss: -72.6k

57k ERs

Reversal Buffer

ER Program D



190k ERs

Reversal Buffer

How does the large reversal experienced by ER Program A affect other ER Programs?

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

Pooled Reversal Buffer debit: 338.5k

161.5k ERs
-161.5k ERs
0 ERs (debit: 161.5k)

Reversal Buffer

ER Program B

Pooled Reversal Buffer loss: -13.2k

95k ERs

Reversal Buffer

Pooled Reversal Buffer

Program	Pooled Buffer ERs (k)	%
A	8.5-8.5 = 0	
B	50-33.2+20 = 36,8	4
C	300-182.6+110 = 227.4	22
D	1000-614.2+370 = 755.8	74
Balance	1358.5-838.5+500 = 1020	100

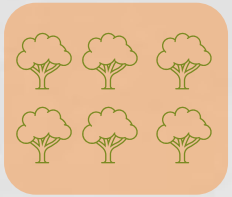
ER Program C

Pooled Reversal Buffer loss: -72.6k

57k ERs

Reversal Buffer

ER Program D



Pooled Reversal Buffer loss: -244.2k

190k ERs

Reversal Buffer

B. Proposed revisions to the current FCPF BGL

Identified areas of improvement in the FCPF BGL version 4.1

Additionally, the CFPs requested the FMT to conduct further consultations on the remaining changes it proposed to the Buffer Guidelines before CF27. These changes include:

1. **Merging the Reversal Buffer and Pooled Reversal Buffer** into a single Pooled Reversal Buffer to allow for total pooling

2. **Cancelling Uncertainty Buffer ERs and any available Excess ERs in case of a reversal before cancelling Pooled Reversal Buffer ERs beyond the contribution of the affected ER Program** to the Pooled Buffer

3. **Disallowing the release of Uncertainty Buffer ERs** in cases **where the ER Program has not yet fully replenished the Pooled Reversal Buffer** after a reversal

4. **Requiring Uncertainty Buffer ERs to contribute to the Pooled Reversal Buffer when they are released** due to improved ER estimations

5. **Requiring ER Programs that have not completely replenished the Pooled Reversal Buffer at the end of the Crediting Period** to **cancel any remaining Excess ERs** held by such Programs **up to the amount required to compensate** their Pooled Reversal Buffer debit

6. **Establishing that Uncertainty Buffer ERs shall only be transferred to an equivalent buffer account at the end of the Crediting Period if** the ER Program **has completely replenished any Pooled Reversal Buffer** debits

Identified areas of improvement in the FCPF BGL version 4.1

1 Merging the Reversal Buffer and Pooled Reversal Buffer into a single Pooled Reversal Buffer to allow for total pooling

- **Why pooling**?
  - Risk pooling is a strategy that **combines the potential risks of a number of participants into a single pool**
  - By **distributing the risks among a larger group, the impact of individual risks is reduced**, allowing for more predictable and manageable outcomes.

- The **benefits of risk pooling** include:
  - **Spreading risk**: **the impact of individual losses is distributed among the entire pool**. This **reduces the burden on individual participants** and provides them with **protection in case of unexpected events**
  - **Affordability**: Risk pooling **makes contributions more affordable for individual participants**. The **contribution each policyholder pays is typically smaller than the potential losses they might face**, making **participation accessible to a broader population**.

Identified areas of improvement in the FCPF BGL version 4.1

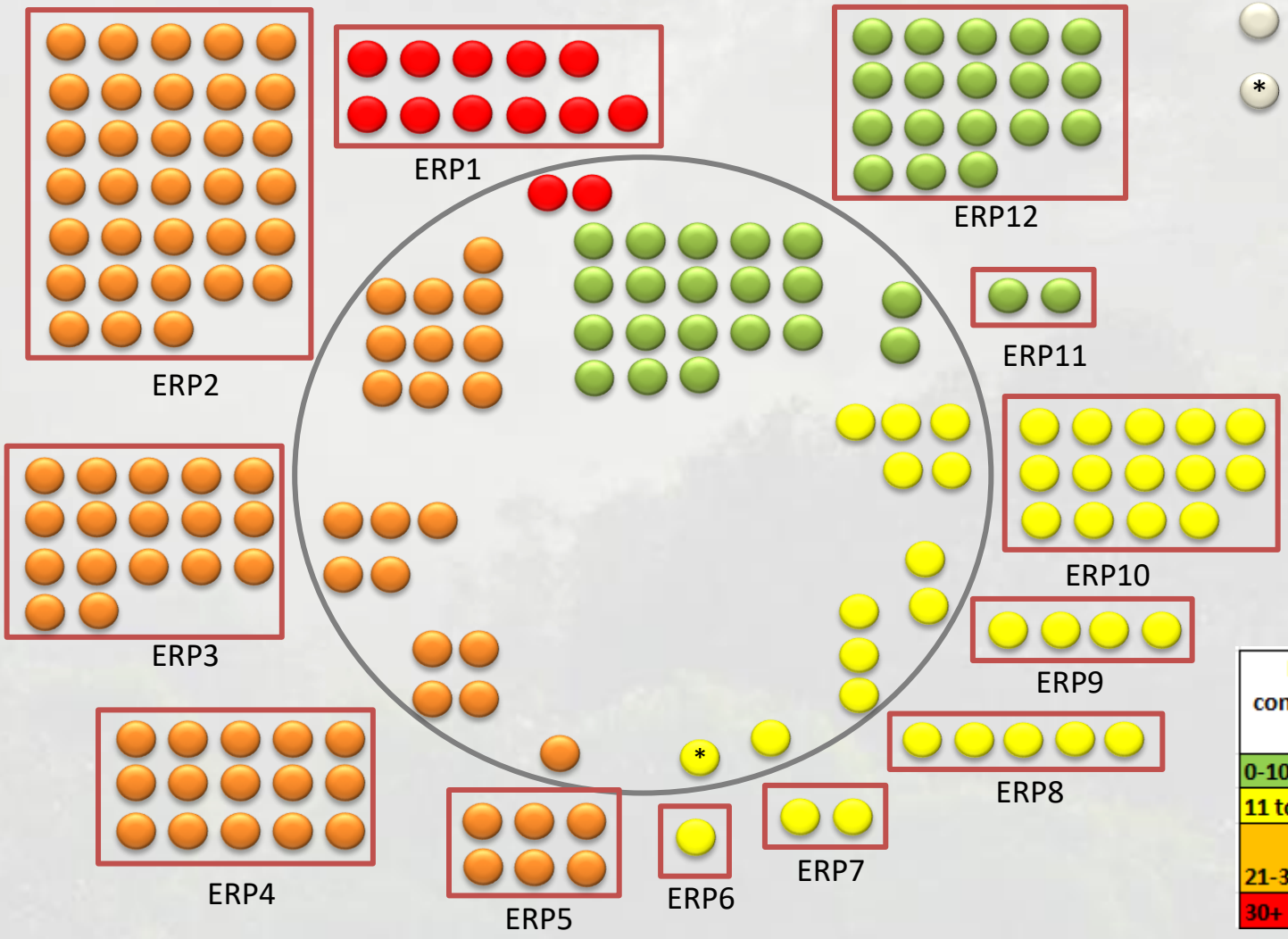
Image source: Fincash

Identified areas of improvement in the FCPF BGL version 4.1

Rationale for the proposed revision

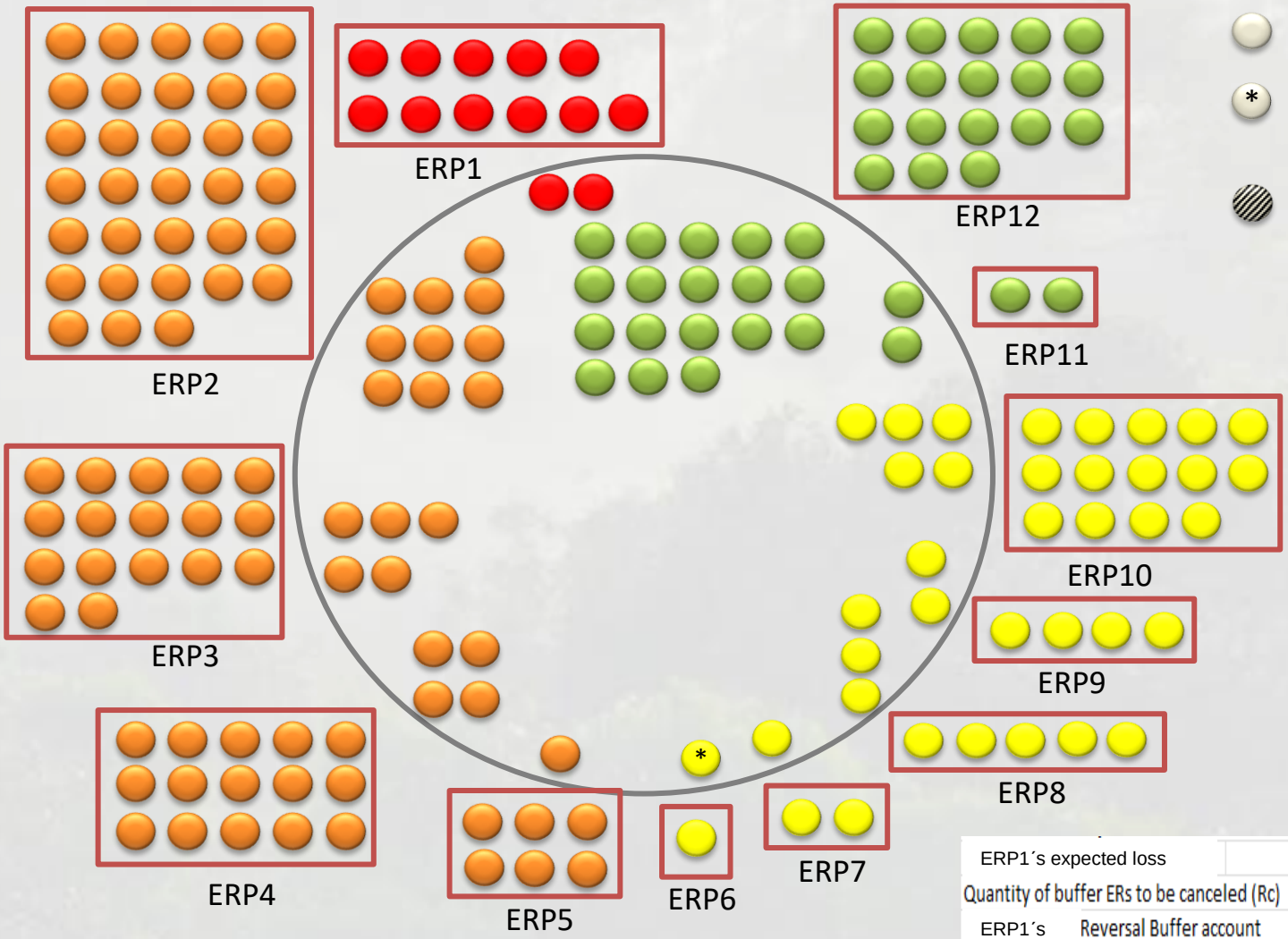
- Modelling by FMT has shown that **the limited volume of the Pooled Buffer (5% of ERs generated after uncertainty discount) would have significant limitations to cover potential reversals**, affecting the integrity of the RMM.

FCPF CF reversal buffers´ status after a potential ER Program Reversal



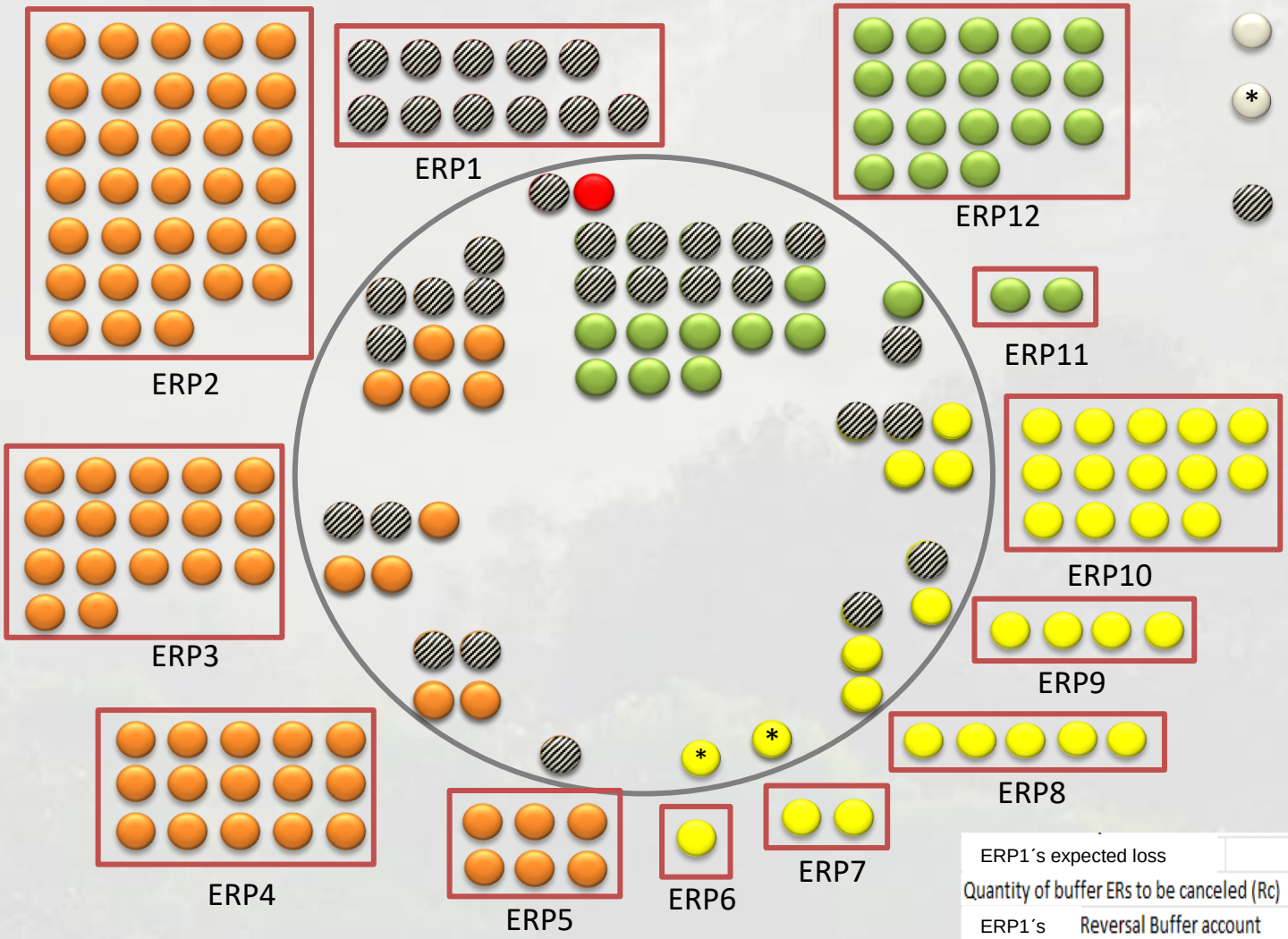
Buffer contribution (%)	Risk ER Program category
0-10	low
11 to 20	medium
21-30	medium-high
30+	high

FCPF CF reversal buffers´ status after a potential ER Program Reversal



ERP1´s expected loss	6,071,766
Quantity of buffer ERs to be canceled (Rc)	3,697,108
ERP1´s Reversal Buffer account	1,165,228
Total pooled buffer ERs	5,223,737
Shortfall after deducting ERP1´s reversal buffer ERs	-2,531,880
Pooled buffer balance after covering shortfall	2,691,857

FCPF CF reversal buffers´ status after a potential ER Program Reversal



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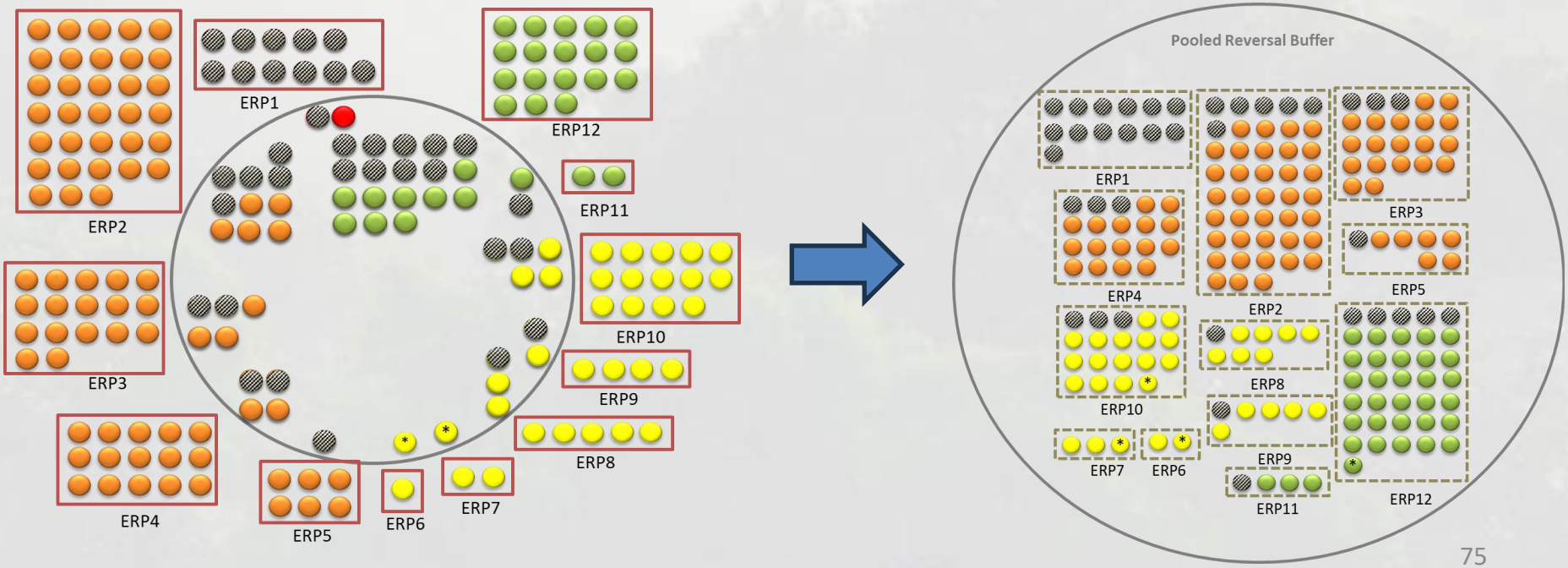
Shortfall after deducting ERP1´s reversal buffer ERs	-2,531,880
Pooled buffer balance after covering shortfall	2,691,857

Identified areas of improvement in the FCPF BGL version 4.1

Proposed revision

- It is proposed to eliminate the ER Programs´ Reversal Buffer accounts and to transfer all their current and any future Buffer ERs to a **newly created Pooled Reversal Buffer Account**
- However, each **individual** ER Program´s Pooled Reversal Buffer **contributions will be identifiable**



Identified areas of improvement in the FCPF BGL version 4.1

Implications for ER Programs

- ER **Programs will have more coverage against potentially significant reversals through the Pooled Reversal Buffer**
- **Contributions** to the Pooled Reversal Buffer **remain relatively low and increased contributions are avoided**

Identified areas of improvement in the FCPF BGL version 4.1

2 **Cancelling Uncertainty Buffer ERs and any available Excess ERs in case of a reversal before cancelling Pooled Reversal Buffer ERs beyond the contribution of the affected ER Program to the Pooled Buffer**

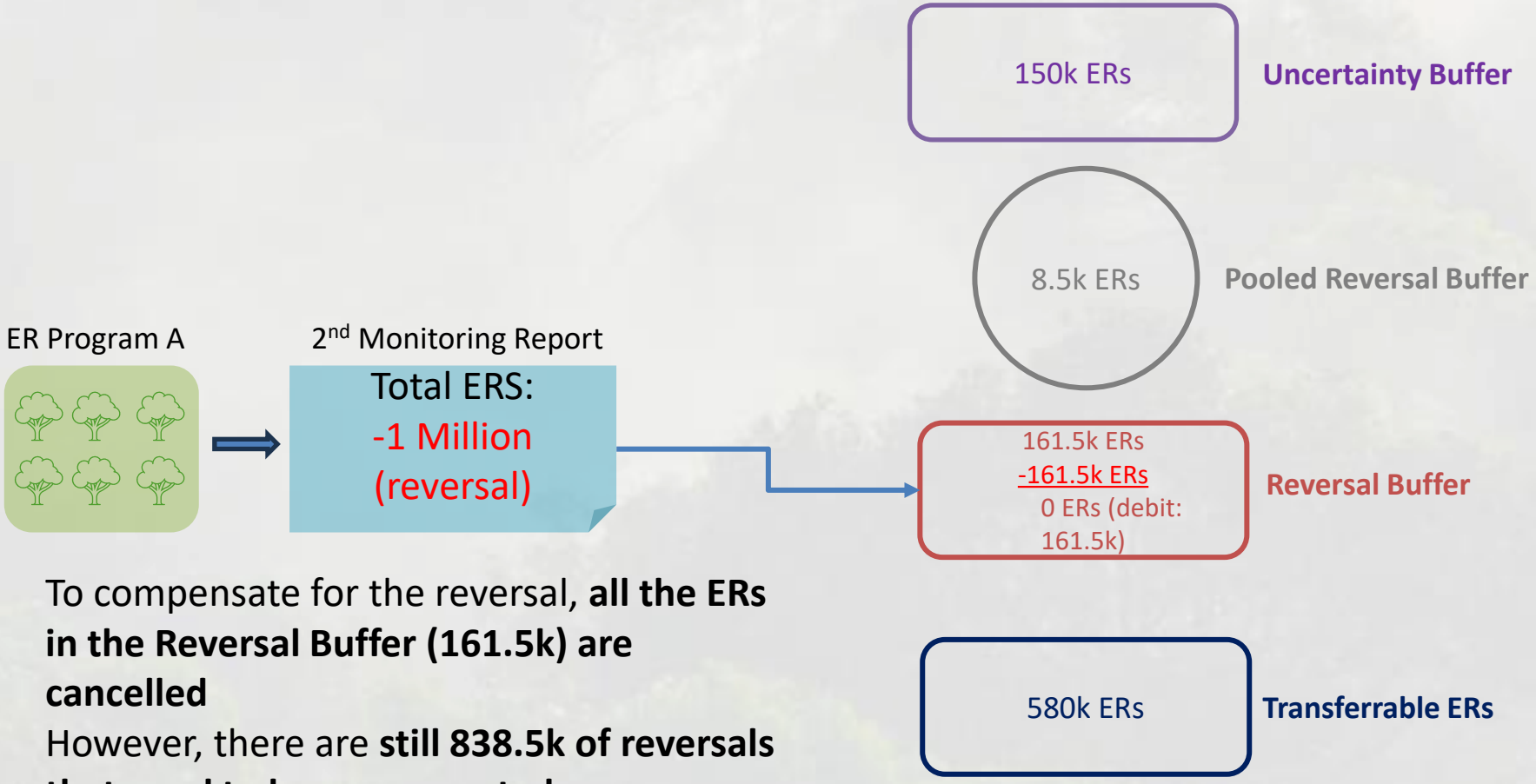
Proposed revision

- It is proposed that ER Programs experiencing a reversal **larger than their contributions to the Pooled Reversal Buffer cancel the ERs** they have deposited **in the Uncertainty Buffer and** any available **excess ERs before** being able to **cancel further Pooled Reversal Buffer ERs**

Rationale for the proposed revision

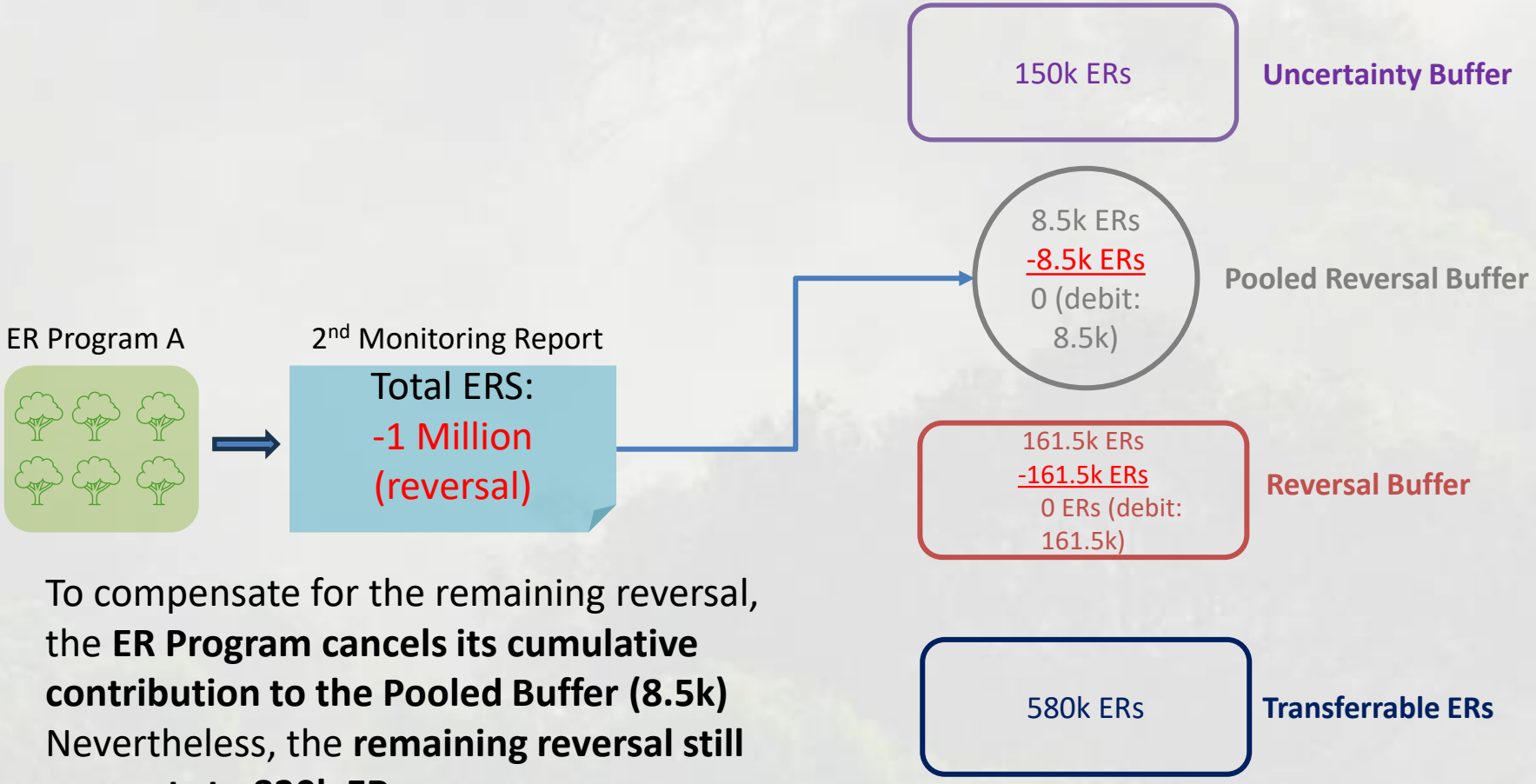
- Where the contribution of an ER Program to the Pooled Reversal Buffer is not sufficient to address a reversal, Uncertainty Buffer ERs and any existing excess ERs shall be cancelled before cancelling other Program´s contributions to the Pooled Reversal Buffer, thus **reflecting the responsibility of the affected ER Program** and the **fairness of the Reversal Management Mechanism**

Year 2: the ER Program experiences a large reversal



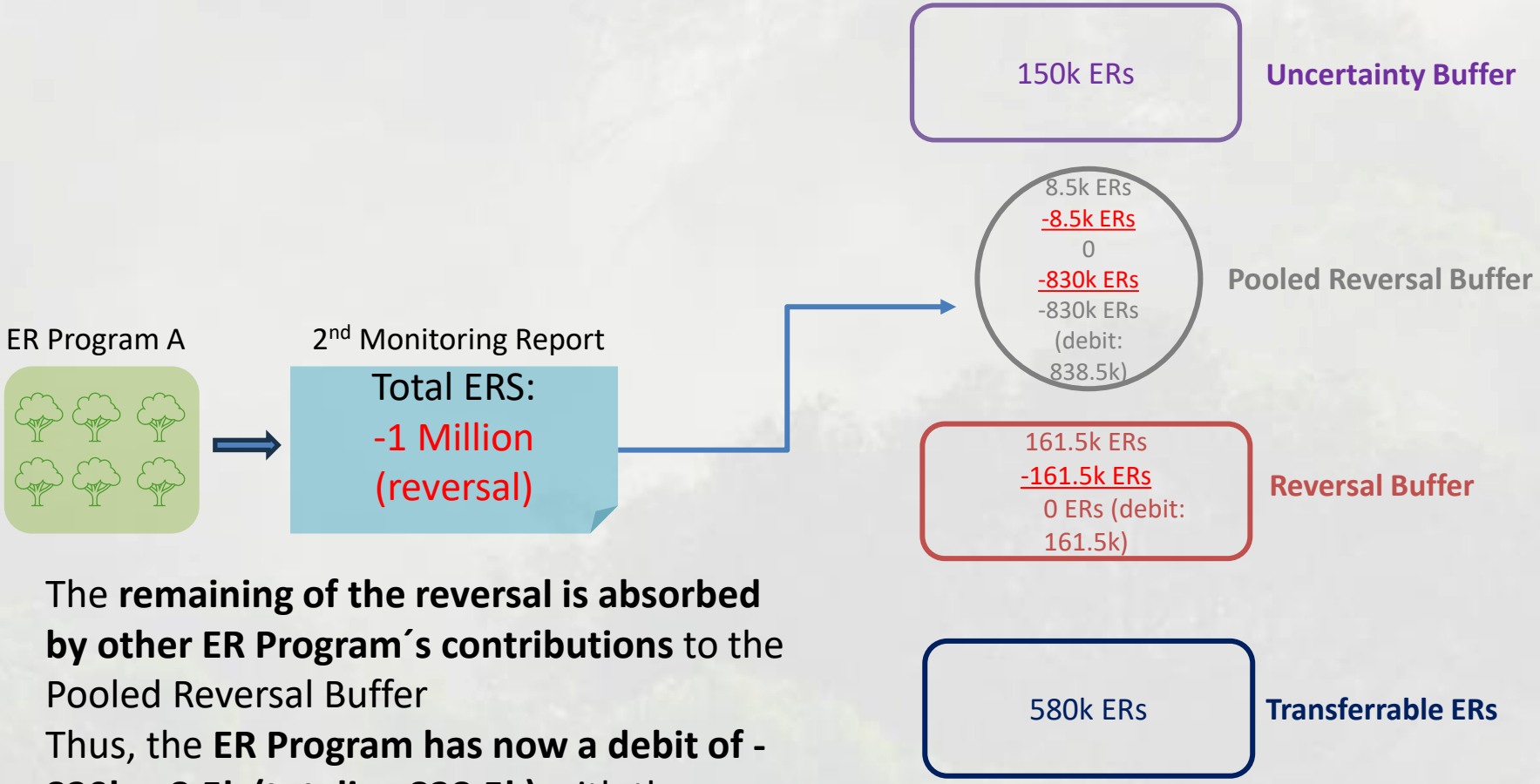
- To compensate for the reversal, **all the ERs in the Reversal Buffer (161.5k) are cancelled**
- However, there are **still 838.5k of reversals that need to be compensated**

Year 2: the ER Program experiences a large reversal



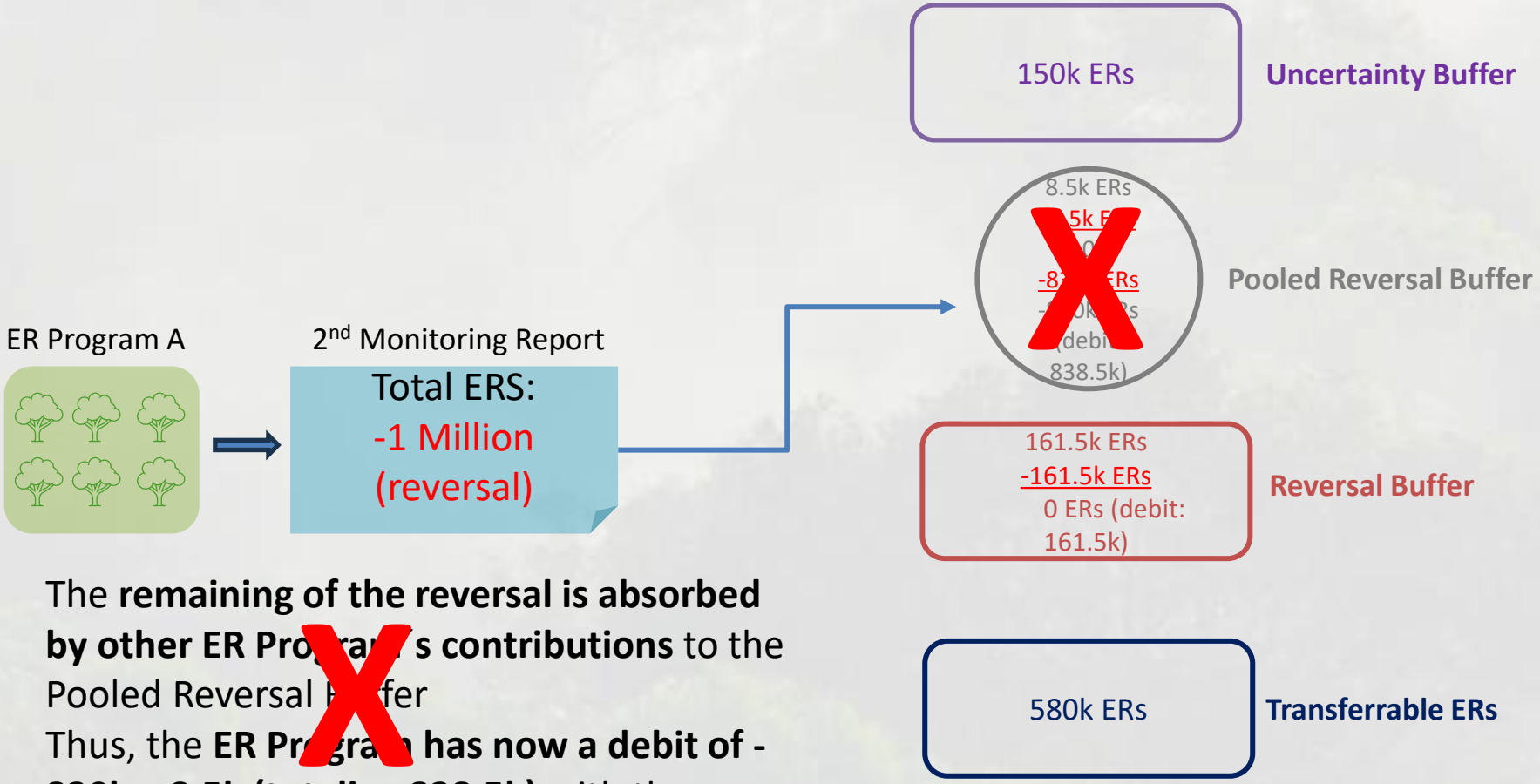
- To compensate for the remaining reversal, the **ER Program cancels its cumulative contribution to the Pooled Buffer (8.5k)**
- Nevertheless, the **remaining reversal still amounts to 830k ERs**

Year 2: the ER Program experiences a large reversal



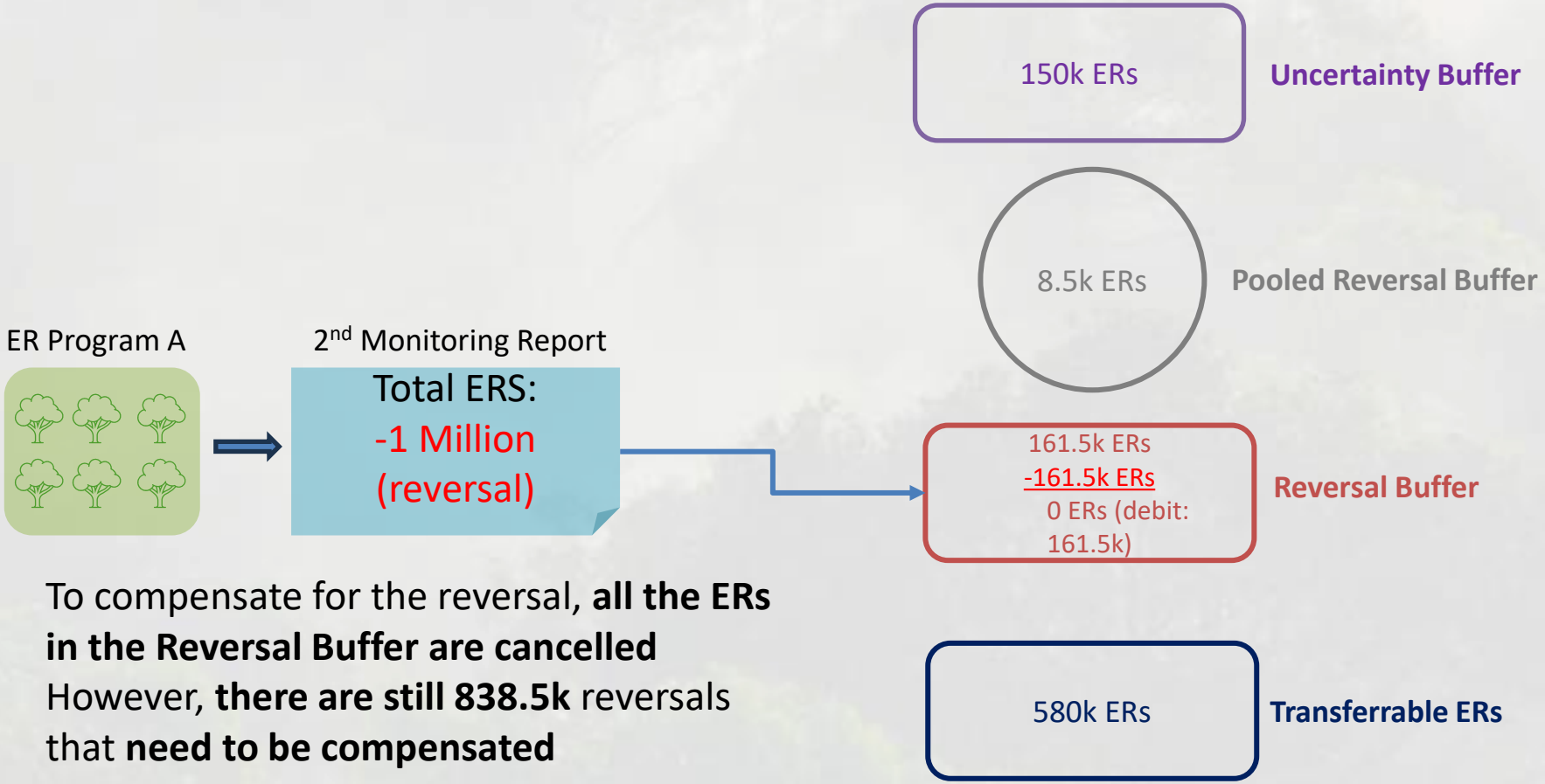
- The **remaining of the reversal is absorbed by other ER Program´s contributions** to the Pooled Reversal Buffer
- Thus, the **ER Program has now a debit of -830k + 8.5k (totaling 838.5k)** with the Pooled Reversal Buffer

Year 2: the ER Program experiences a large reversal



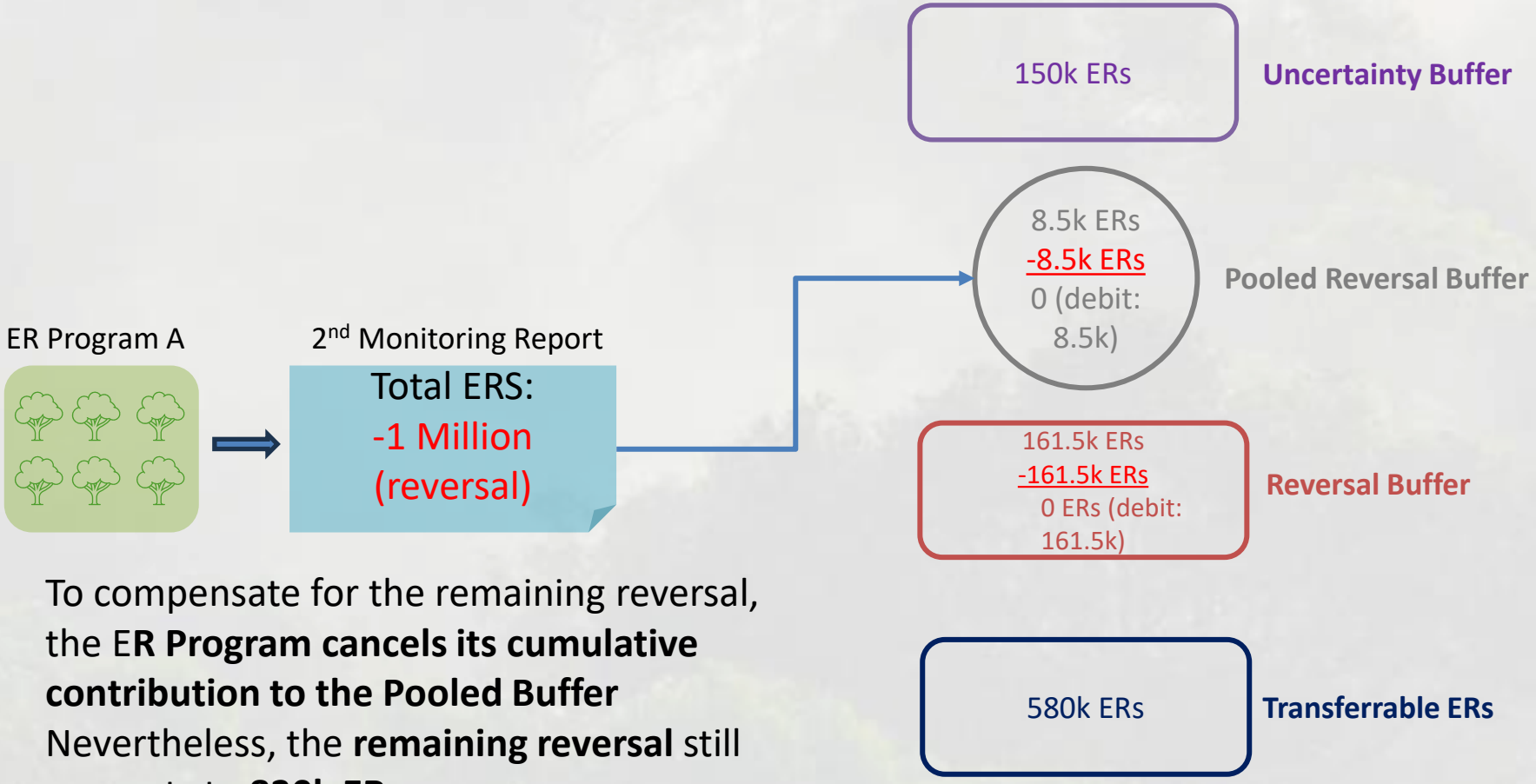
- The **remaining of the reversal is absorbed by other ER Pro[illegible]s contributions** to the Pooled Reversal B[illegible]fer
- Thus, the **ER Pr[illegible] has now a debit of -830k + 8.5k (totaling 838.5k)** with the Pooled Reversal Buffer

Year 2: the ER Program experiences a large reversal



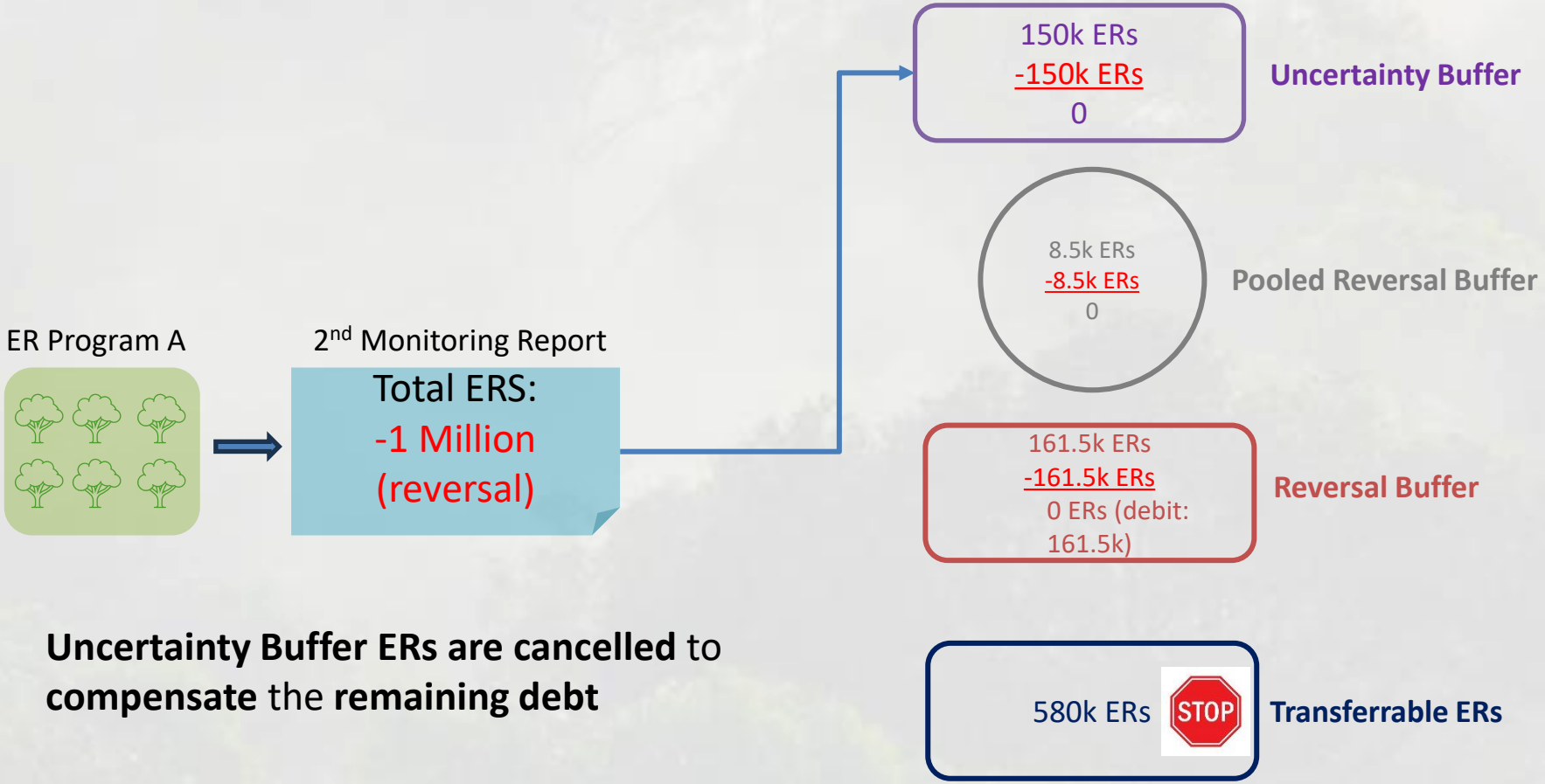
- To compensate for the reversal, **all the ERs in the Reversal Buffer are cancelled**
- However, **there are still 838.5k** reversals that **need to be compensated**

Year 2: the ER Program experiences a large reversal



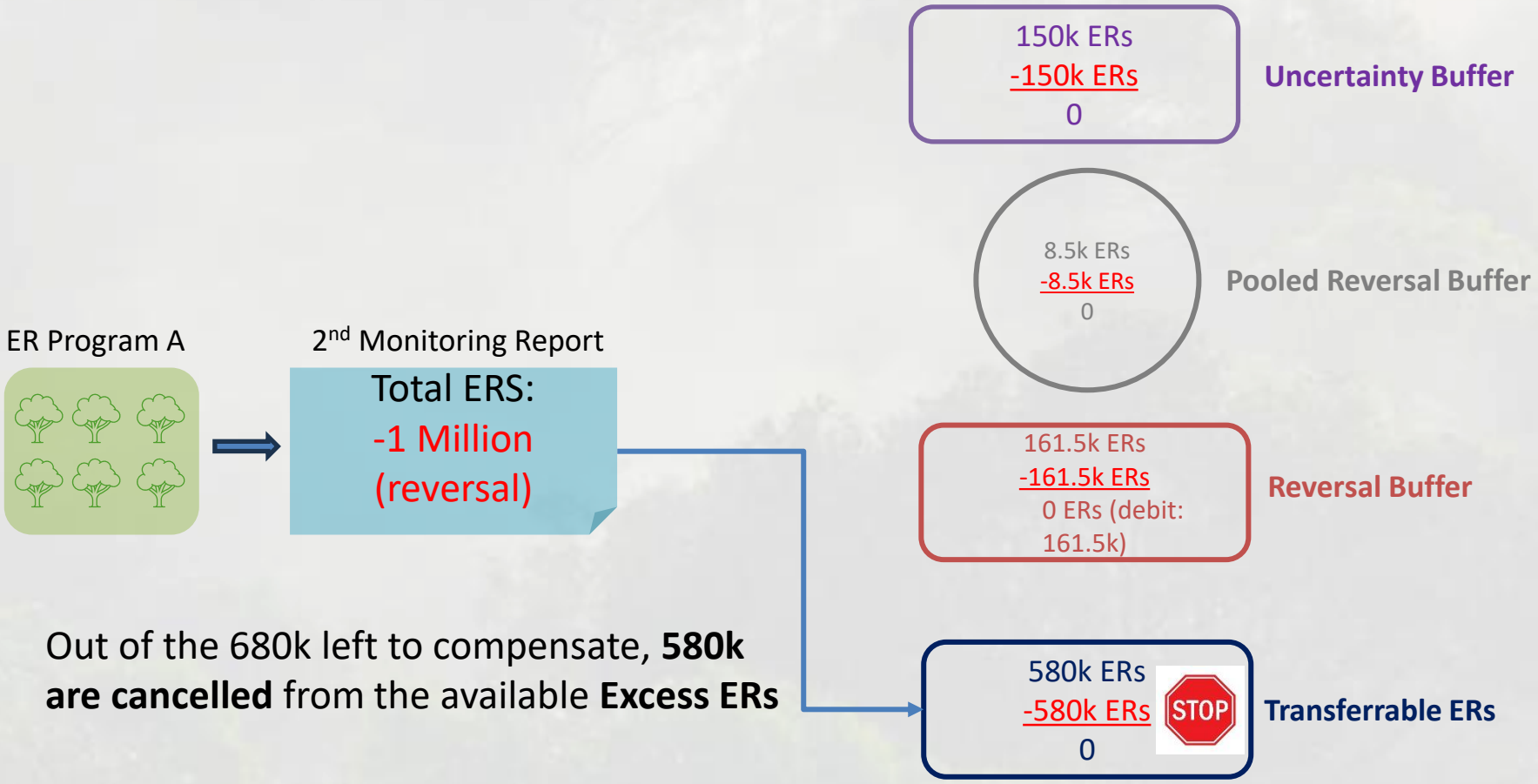
- To compensate for the remaining reversal, the E**R Program cancels its cumulative contribution to the Pooled Buffer**
- Nevertheless, the **remaining reversal** still amounts to **830k ERs**

Year 2: the ER Program experiences a large reversal



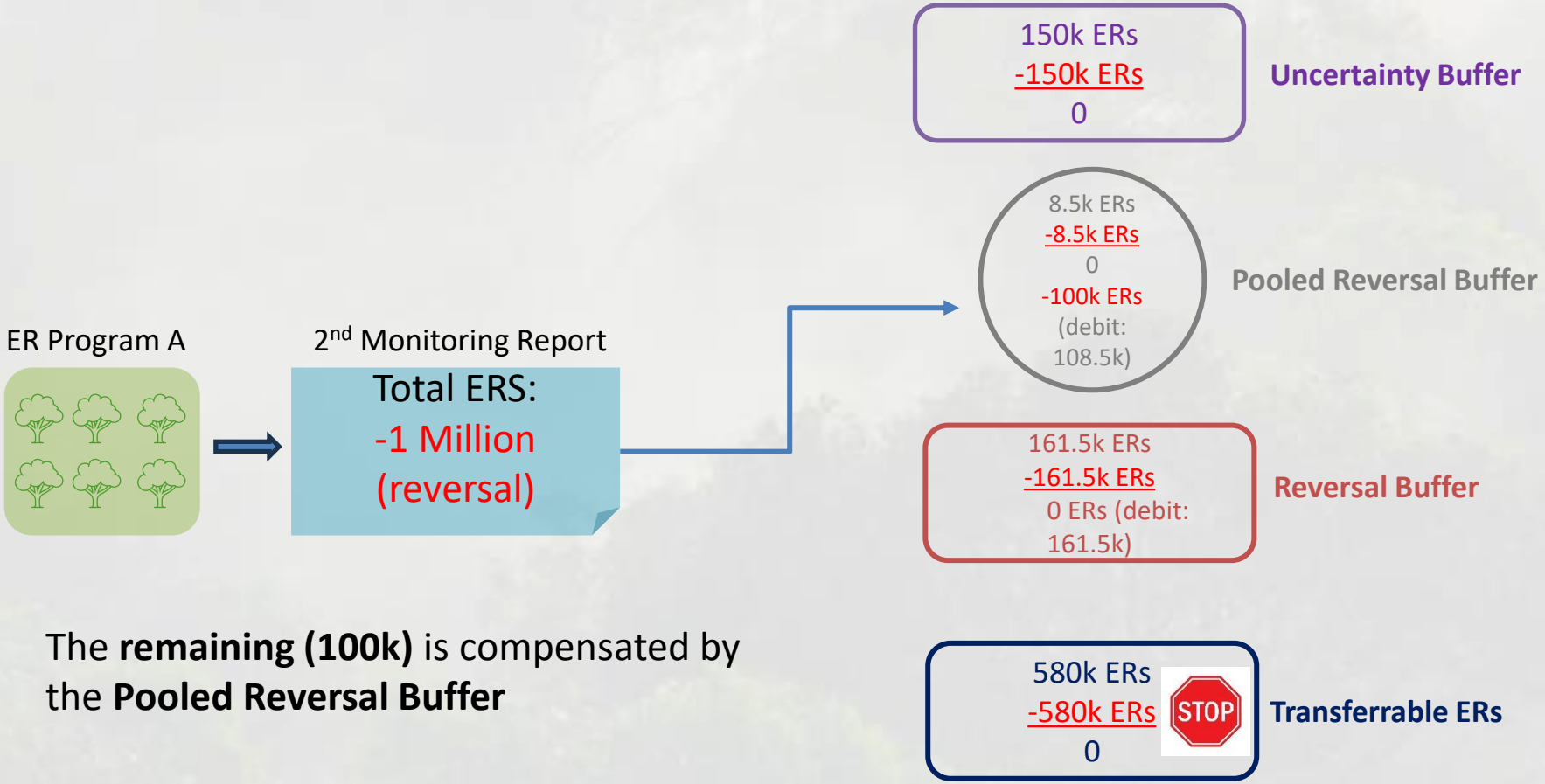
- **Uncertainty Buffer ERs are cancelled** to **compensate** the **remaining debt**

Year 2: the ER Program experiences a large reversal



- Out of the 680k left to compensate, **580k are cancelled** from the available **Excess ERs**

Year 2: the ER Program experiences a large reversal



- The **remaining (100k)** is compensated by the **Pooled Reversal Buffer**

Identified areas of improvement in the FCPF BGL version 4.1

Implications for ER Programs

- ER Programs affected by "large" reversals will have to **cancel their Uncertainty Buffer ERs and**, if available, **Excess ERs**, **in addition to their contributions** to the Pooled Reversal Buffer **before affecting other Program´s contributions to it**
- ER **Programs not affected by reversals** will be **guaranteed that the cancellation of parts of their ER contributions** to the Pooled Reversal Buffer by other Programs **will always be a "last resort" option**

Identified areas of improvement in the FCPF BGL version 4.1

3 **Disallowing the release of Uncertainty Buffer ERs in cases where the ER Program has not yet fully replenished the Pooled Reversal Buffer after a reversal**

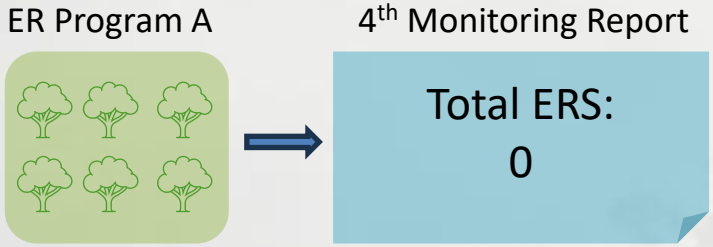
Rationale for the proposed revision

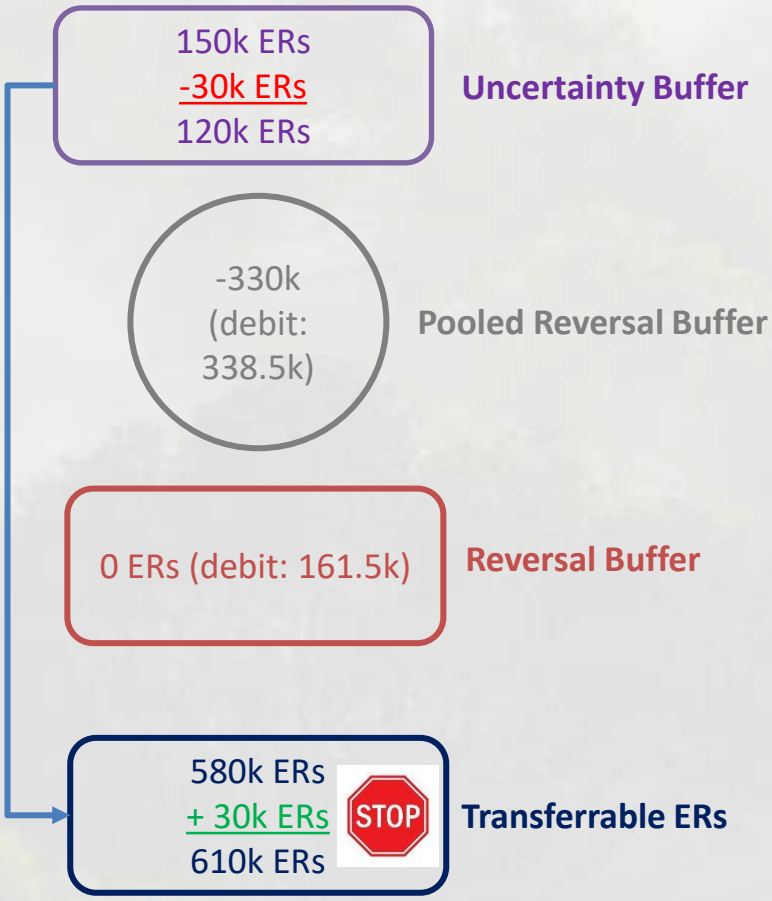
- Under the current requirements, an ER Program that, due to a reversal has a **Pooled Reversal Buffer debit**, **could potentially release Uncertainty Buffer ERs** if it managed to **reduce the uncertainty** of its ER estimates
- The proposed **revision would make it a priority to replenish the Pooled Reversal Buffer** and would **avoid a situation** where an **ER Program could transfer Uncertainty Buffer released ERs before addressing such debit**

Proposed revision

- It is proposed to introduce the condition that **the release of ERs from the Uncertainty Buffer can only occur if the ER Program has completely replenished** any **Pooled Reversal Buffer debits**

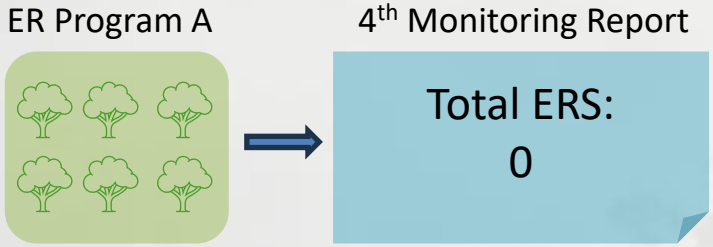
Year 4: the ER Program does not generate ERs, but improves its ER estimates

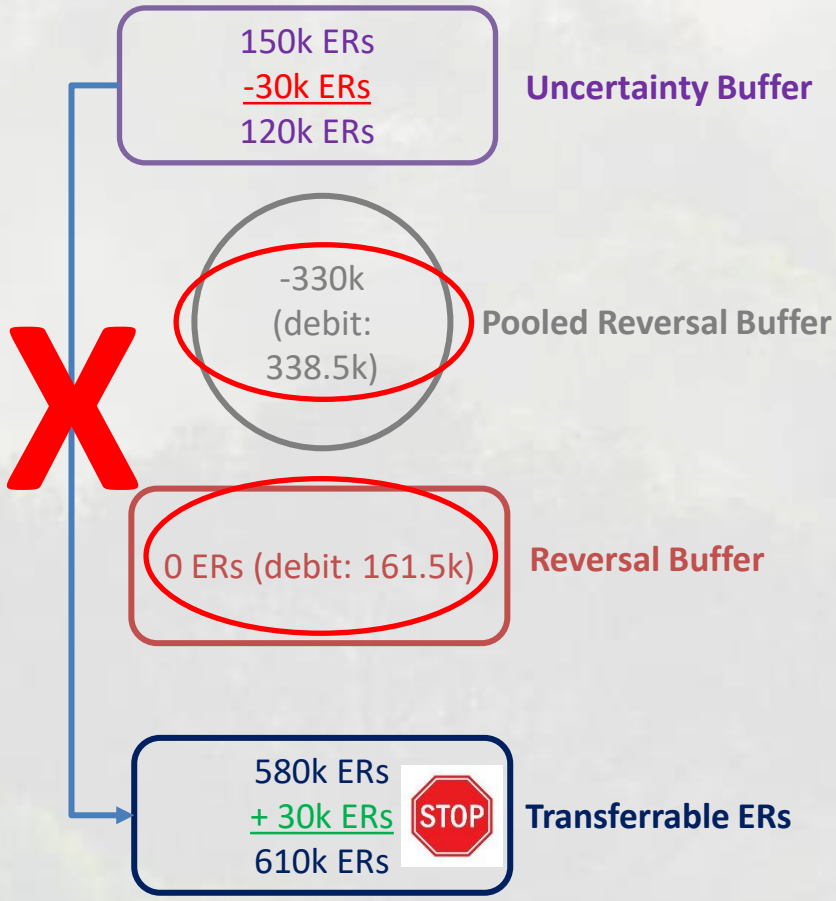




- The **ER Program is therefore able to release 30k ERs** from the **Uncertainty Buffer** (150k – 120k)
- The **released ERs become transferrable ERs**, although the ER Program cannot transfer them due to its reversal buffer debts

Year 4: the ER Program does not generate ERs, but improves its ER estimates





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- The **released ERs become transferrable ERs**, although the ER Program cannot transfer them due to its reversal buffer debts

Identified areas of improvement in the FCPF BGL version 4.1

Implications for ER Programs

- ER Programs with **reversal buffer debts will need to cover them** before being able to **release ERs from the Uncertainty Buffer**

Identified areas of improvement in the FCPF BGL version 4.1

4 **Requiring Uncertainty Buffer ERs to contribute to the Pooled Reversal Buffer when they are released due to improved ER estimations**

Proposed revision

- It is proposed that, **before being released from the Uncertainty Buffer**, **ERs should contribute to the Pooled Reversal Buffer account** by applying the current **Actual Reversal Risk Set-Aside Percentage**

Year 4: the ER Program does not generate ERs, but improves its ER estimates

ER Program A

4th Monitoring Report

Total ERS:
0

- In the fourth monitoring period, the ER Program achieves 0 Total ERs, **but it reduces the aggregate uncertainty** of its ER **to 85%**

150k ERs — **Uncertainty Buffer**

-330k (debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

580k ERs 

Transferrable ERs

Year 4: the ER Program does not generate ERs, but improves its ER estimates

ER Program A

4th Monitoring Report

Total ERS:
0

150k ERs — **Uncertainty Buffer**

-330k (debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

580k ERs 

Transferrable ERs

- Therefore, it **is able to apply a lower conservativeness factor (12%),** although the cumulative **ER estimates remain the same**

Table 1. Quantification Uncertainty Conservativeness Factors

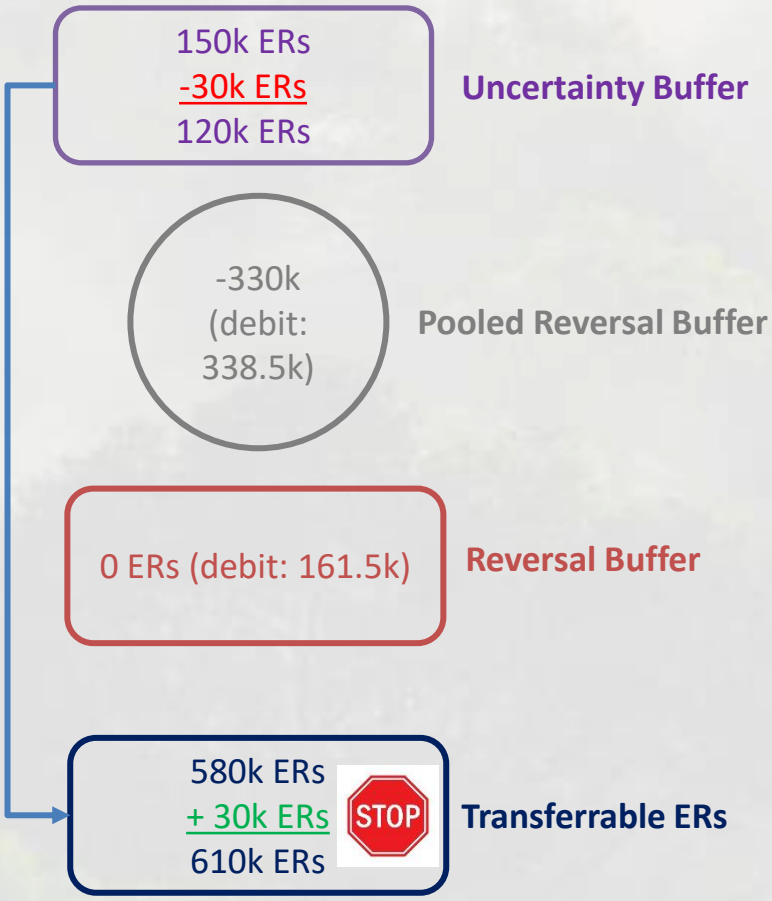
Aggregate Uncertainty of ERs	Conservativeness Factor
≤ 15%	0%
> 15% and ≤ 30%	4%
> 30% and ≤ 60%	8%
> 60% and ≤ 100%	12%
> 100%	15%

Year 4: the ER Program does not generate ERs, but improves its ER estimates

ER Program A

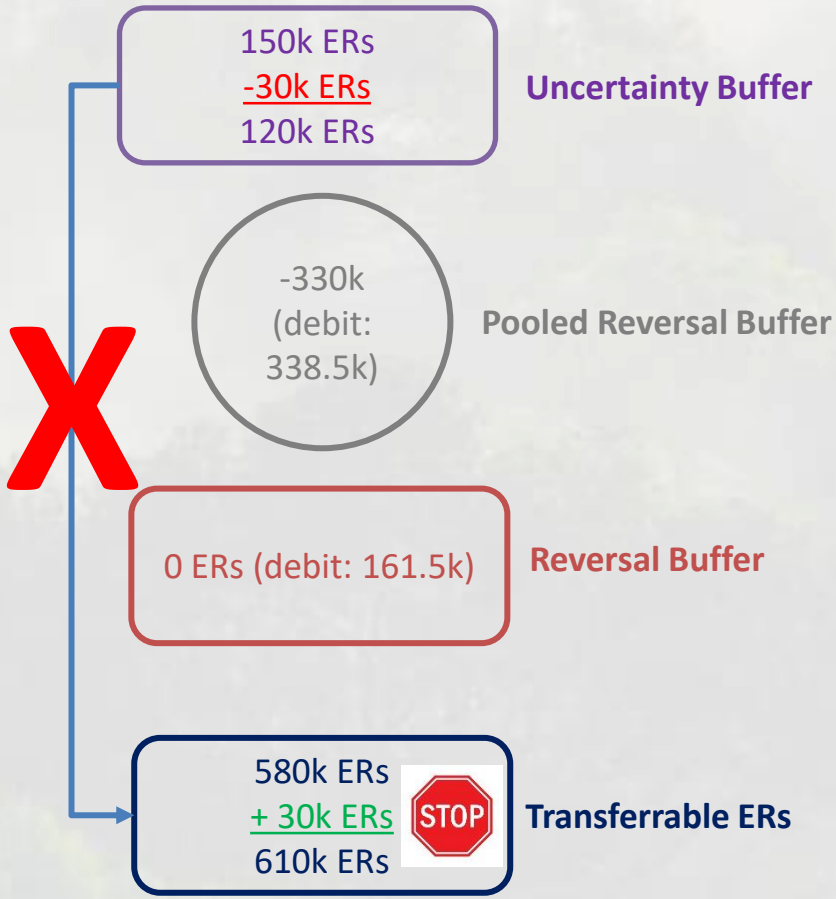
4th Monitoring Report

Total ERS:
0



- The ER Program is therefore **able to release 30k ERs from the Uncertainty Buffer** (150k – 120k)
- The **released ERs become transferrable ERs**, although the ER Program cannot transfer them due to its reversal buffer debts

Year 4: the ER Program does not generate ERs, but improves its ER estimates



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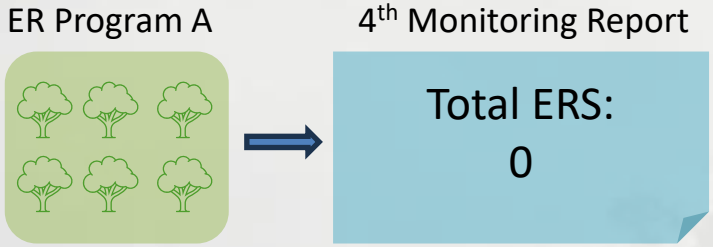
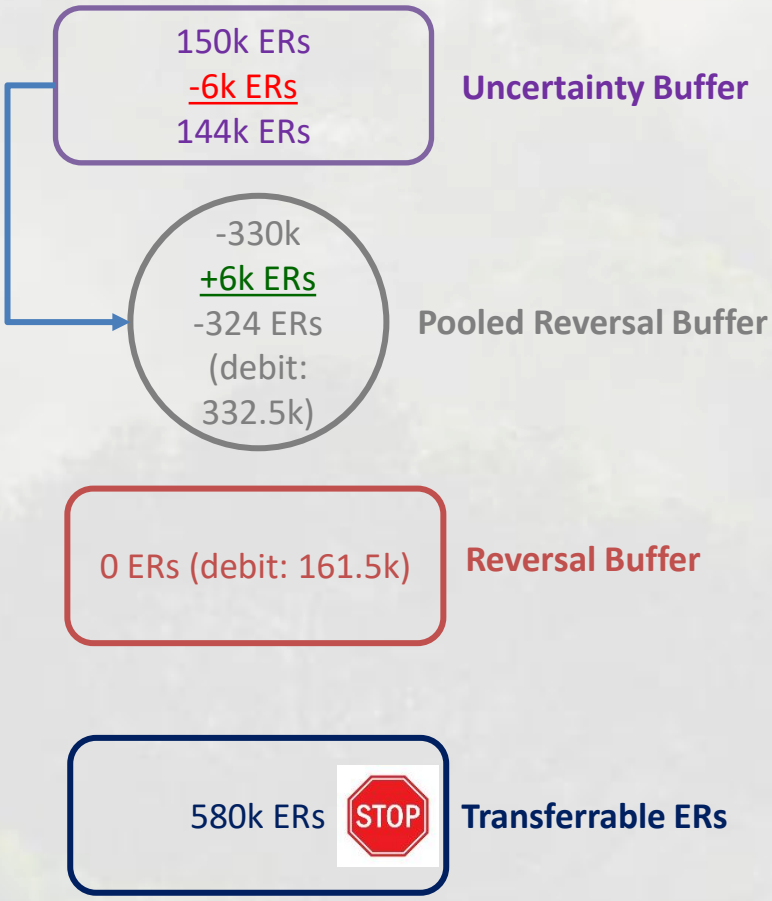
Year 4: the ER Program does not generate ERs, but improves its ER estimates



- The ER Program is therefore **able to release 30k ERs from the Uncertainty Buffer** (150k – 120k).
- The **30k contribute to the Pooled Reversal Buffer with 6k (20%)**

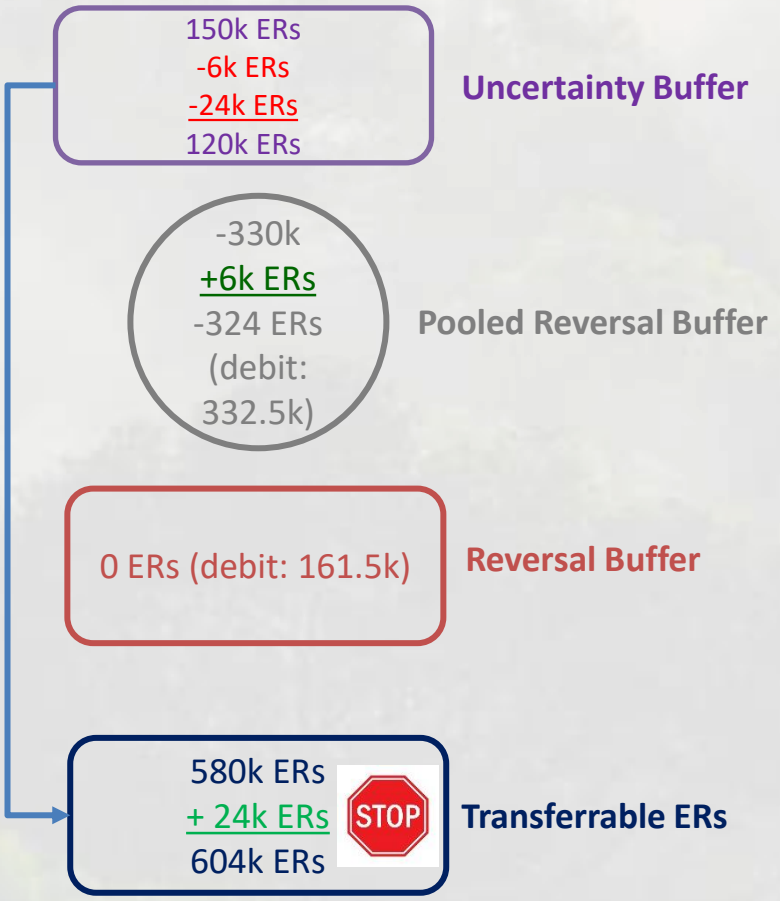


Year 4: the ER Program does not generate ERs, but improves its ER estimates

ER Program A

4th Monitoring Report

Total ERS:
0



- The **remaining ERs become transferrable** ERs, although the ER Program cannot transfer them due to its reversal buffer debts

Identified areas of improvement in the FCPF BGL version 4.1

Implications for ER Programs

- While **releasing ERs from the Uncertainty Buffer**, ER Programs will need to **estimate the proportion of such ERs that should be transferred to the Pooled Reversal Buffer** and the **"net" ERs released**

Identified areas of improvement in the FCPF BGL version 4.1

5 **Requiring ER Programs that have not completely replenished the Pooled Reversal Buffer at the end of the Crediting Period to cancel any remaining Excess ERs held by such Programs up to the amount required to compensate their Pooled Reversal Buffer debit**

Rationale for the proposed revision

- ER Programs that **reach the end of the Crediting Period with Pooled Reversal Buffer debits** shall **make every effort to address this situation**
- The **cancellation of Excess ERs**, where available, **is one of the most straightforward alternatives** to do so

Proposed revision

- It is proposed that, if at the **end of the Crediting Period** an ER Program has **not completely replenished the Pooled Reversal Buffer**, any **remaining Excess ERs** held by such Program shall be **cancelled up to the amount required to compensate** its Pooled Reversal Buffer **debit**

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- In the fifth monitoring period, the **ER Program achieves 0 Total ERs**

120k ERs — **Uncertainty Buffer**

-330k (debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

610k ERs 

Transferrable ERs

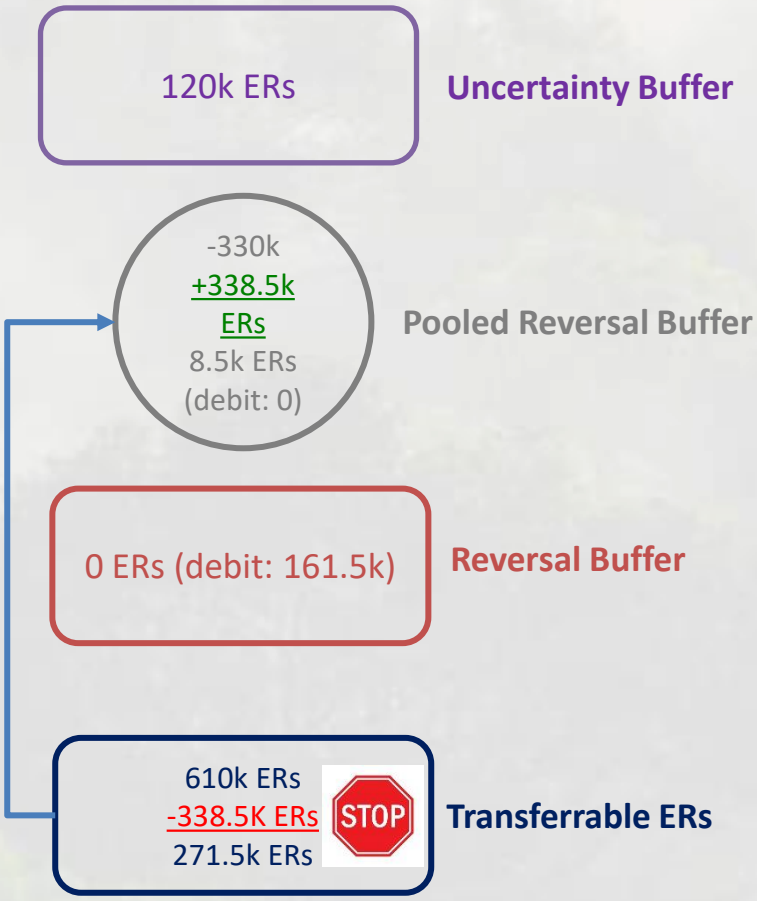
Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- Excess **ERs are cancelled to compensate** for the ER Program **debt with the Pooled Reversal Buffer**



Year 5: the ER Program does not generate ERs and the Crediting Period ends

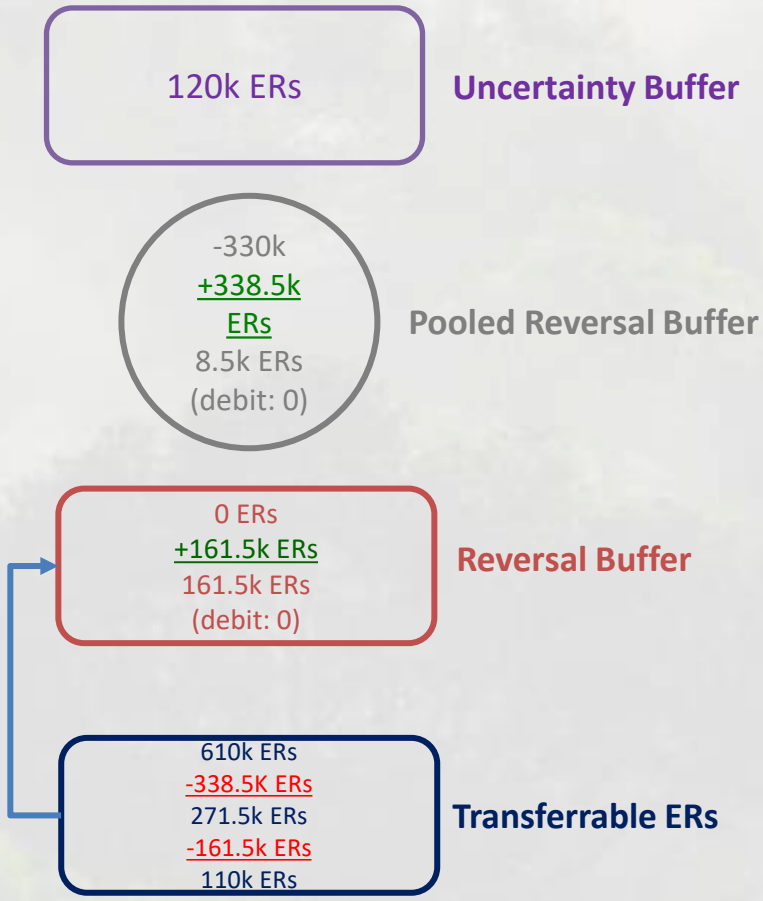
ER Program A

5th Monitoring Report

Total ERS:
0

- Excess ERs are **also cancelled to compensate for the program´s debt** with the **Reversal Buffer**

Note that, based on another proposed change, both reversal buffers would be merged into the Pooled Reversal Buffer



Identified areas of improvement in the FCPF BGL version 4.1

Implications for ER Programs

- ER Programs with **Pooled Reversal Buffer debits** holding **Excess ERs will have to use them to cover such debits** to the extent possible
- This **measure may allow ER Programs to regain their capacity to transfer ERs** if they have any **ERs left after covering their reversal buffer debits**

Identified areas of improvement in the FCPF BGL version 4.1

6 **Establishing that Uncertainty Buffer ERs shall only be transferred to an equivalent buffer account at the end of the Crediting Period if the ER Program has completely replenished any Pooled Reversal Buffer debits**

Rationale for the proposed revision

- Where an ER Program **ends the Crediting Period with a negative balance in the Pooled Reversal Buffer**, the **transfer of Uncertainty Buffer ERs to another standard** before addressing such debit **would imply inflating the overall volume of ERs achieved by the ER Program** and transferring this problem to the other standard´s accounts

Proposed revision

- It is proposed that, **if at the end of the Crediting Period** an ER Program has **not completely replenished the Pooled Reversal Buffer**, the ER Program **shall not be able to transfer any Uncertainty Buffer ERs** remaining in its account **before doing so**

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- In the fifth monitoring period, the **ER Program achieves 0 Total ERs**

120k ERs — **Uncertainty Buffer**

-330k (debit: 338.5k) — **Pooled Reversal Buffer**

0 ERs (debit: 161.5k) — **Reversal Buffer**

610k ERs 

Transferrable ERs

Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- Given that this is the end of the Crediting Period, the **ER Program transfers ERs from the Uncertainty Buffer to an equivalent buffer account outside the CF**

120k ERs
-120k ERs
0

Uncertainty Buffer

-330k
(debit:
338.5k)

Pooled Reversal Buffer

0 ERs (debit: 161.5k)

Reversal Buffer

610k ERs

Transferrable ERs

+120k ERs

Standard X´s uncertainty buffer

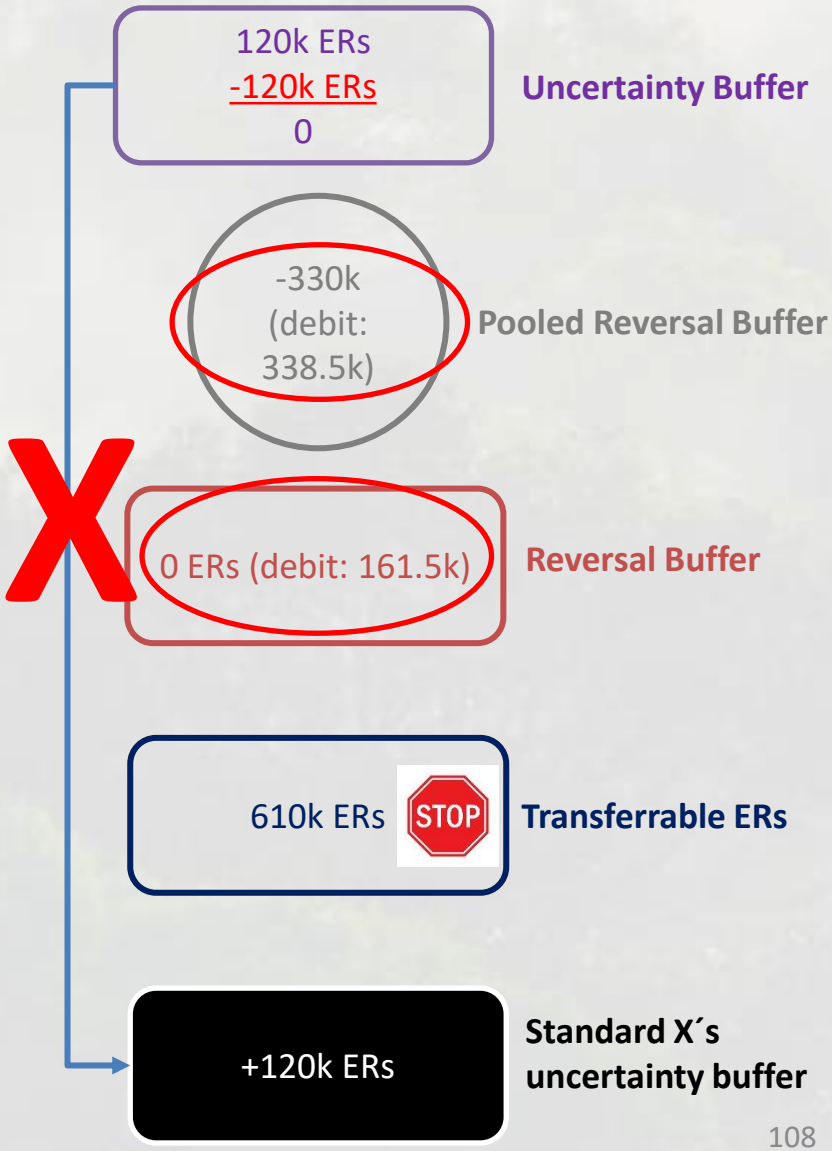
Year 5: the ER Program does not generate ERs and the Crediting Period ends

ER Program A

5th Monitoring Report

Total ERS:
0

- Given that this is the end of the Crediting Period, the **ER Program transfers ERs from the Uncertainty Buffer to an equivalent buffer account outside the CF**



Identified areas of improvement in the FCPF BGL version 4.1

Implications for ER Programs

- ER Programs with **Pooled Reversal Buffer debits** holding **Uncertainty Buffer ERs at the end of the Crediting Period** will **not be able to transfer them to another standard** until they cover such debits

Questions?

Thank you