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1 diff --git a/reports/Fiji_ER_Estimate_AccuracyAssessment.html
b/reports/Fiji_ER_Estimate_AccuracyAssessment.html
2 index f25ee6c..647fbb0 100644
3 --- a/reports/Fiji_ER_Estimate_AccuracyAssessment.html
4 +++ b/reports/Fiji_ER_Estimate_AccuracyAssessment.html
5 @@ -566,7 +566,7 @@ pre code {
6
7
8 <h1 class="title toc-ignore">Mapped Areas Accuracy Assessment Report</h1>
9 -<h4 class="date">15 December, 2023</h4>
10 +<h4 class="date">06 February, 2024</h4>
11
12 </div>
13
14 diff --git a/reports/Fiji_ER_Estimate_Sensitivity.html
b/reports/Fiji_ER_Estimate_Sensitivity.html
15 index 13db422..5d9fad8 100644
16 --- a/reports/Fiji_ER_Estimate_Sensitivity.html
17 +++ b/reports/Fiji_ER_Estimate_Sensitivity.html
18 @@ -566,7 +566,7 @@ pre code {
19
20
21 <h1 class="title toc-ignore">Monitoring Report Tables Section 5.3</h1>
22 -<h4 class="date">15 December, 2023</h4>
23 +<h4 class="date">06 February, 2024</h4>
24
25 </div>
26
27 diff --git a/reports/Fiji_ER_Estimate_UC.html
b/reports/Fiji_ER_Estimate_UC.html
28 index dc5d67d..badb8c4 100644
29 --- a/reports/Fiji_ER_Estimate_UC.html
30 +++ b/reports/Fiji_ER_Estimate_UC.html
31 @@ -566,7 +566,7 @@ pre code {
32
33
34 <h1 class="title toc-ignore">Monitoring Report Tables 5.2.2, 7.2, and
8</h1>
35 -<h4 class="date">15 December, 2023</h4>
36 +<h4 class="date">06 February, 2024</h4>
37
38 </div>
39
40 diff --git a/reports/Fiji_ER_Estimate_Values.html
b/reports/Fiji_ER_Estimate_Values.html
41 index f98c643..2cae21a 100644
42 --- a/reports/Fiji_ER_Estimate_Values.html
43 +++ b/reports/Fiji_ER_Estimate_Values.html
44 @@ -566,7 +566,7 @@ pre code {
45
46
47 <h1 class="title toc-ignore">Monitoring Report Tables Section 4</h1>
48 -<h4 class="date">15 December, 2023</h4>
49 +<h4 class="date">06 February, 2024</h4>
50

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51 </div>
52
53 diff --git a/reports/Fiji_ER_MonitoringReportExtraTables-2019.Rmd
54 index cd60102..1ccaca1 100644
55 --- a/reports/Fiji_ER_MonitoringReportExtraTables-2019.Rmd
56 +++ b/reports/Fiji_ER_MonitoringReportExtraTables-2019.Rmd
57 @@ -216,7 +216,7 @@ ConvBiomassToCO2e(MonitoredValues$year1$NFDegArea *
58 ##### Monitoring Period, Year 2019, Forest Degradation from softwood fire
59 ```{r echo = FALSE, prompt = FALSE}
60 # Estimate AGB
61 -AGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (MAIBsw / (1 +
62 RootToShootDryLandSmall))
63 +AGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (MAIBsw * (1 -
64 RootToShootDryLandSmall))
65 # Estimate BGB
66 BGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (MAIBsw *
67 RootToShootDryLandSmall)
68 ```
69 @@ -234,40 +234,44 @@ GWP_{N_20} &= `r GWP_N20` \\
70 EF_{CO_2} &= `r EFCO2` \\
71 EF_{CH_4} &= `r EFCH4` \\
72 EF_{N_20} &= `r EFN20` \\
73 -AGB_{i} &= AD_{FDegBurnData,2019,age,i} \times \frac{MAIB_{sw}}{1 +
74 RootToShootRatio_{dll}} \\
75 - &= \{`r MonitoredValues$year1$FDegBurnData$age_yrs` \} \times
76 \frac{`r MAIBsw`}{1 + `r RootToShootDryLandSmall`} \\
77 +AGB_{i} &= AD_{FDegBurnData,2019,age,i} \times MAIB_{sw} \times (1 -
78 RootToShootRatio_{dll}) \\
79 + &= \{`r MonitoredValues$year1$FDegBurnData$age_yrs` \} \times `r
80 MAIBsw` \times (1 - `r RootToShootDryLandSmall`) \\
81 + &= \{`r MonitoredValues$year1$FDegBurnData$age_yrs * MAIBsw * (1 -
82 RootToShootDryLandSmall)` \} \\
83 BGB_{i} &= AD_{FDegBurnData,2019,age,i} \times MAIB_{sw} \times
84 RootToShootRatio_{dll} \\
85 &= \{`r MonitoredValues$year1$FDegBurnData$age_yrs` \} \times `r
86 MAIBsw` \times `r RootToShootDryLandSmall` \\
87 + &= \{`r MonitoredValues$year1$FDegBurnData$age_yrs * MAIBsw *
88 RootToShootDryLandSmall` \} \\
89 EmCO_2AGB_{i} &= AD_{FDegBurnData,2019,area,i} \times AGB_{i} \times
90 CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \\
91 &= \{`r
92 formatDecimal(MonitoredValues$year1$FDegBurnData$area_ha)` \} \\
93 - & \times `r formatDecimal(AGB)` \\
94 + & \times \{`r formatDecimal(AGB)` \} \\
95 & \times `r formatDecimal(CombustFactor)`
96 \times `r GWPCO2` \times `r EFCO2` \times `r 0.001` \\
97 \sum EmCO_2AGB_{i} &= `r sum(MonitoredValues$year1$FDegBurnData$area_ha
98 * AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001)` \\
99 -EmCO_2BGB_{i} &= AD_{FDegBurnData,2019,area,i} \times BGB_{i} \times
100 CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \\
101 +EmCO_2BGB_{i} &= AD_{FDegBurnData,2019,area,i} \times BGB_{i} \times
102 0.47 \times \frac{44}{12} \\
103 &= \{`r

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formatDecimal(MonitoredValues$year1$FDegBurnData$area_ha)`\}\ \
88 - & \times `r formatDecimal(BGB)` \
89 - & \times `r formatDecimal(CombustFactor)`
90 - \times `r GWPCO2` \times `r EFCO2` \times `r 0.001` \
91 -\sum EmCO_2BGB_{i} &= `r sum(MonitoredValues$year1$FDegBurnData$area_ha * BGB * CombustFactor * GWPCO2 * EFCO2 * 0.001)` \
92 + & \times \{`r formatDecimal(BGB)`\}\ \
93 + & \times 0.47 \times \frac{44}{12} \
94 +\sum EmCO_2BGB_{i} &= `r
ConvBiomassToCO2e(sum(MonitoredValues$year1$FDegBurnData$area_ha * BGB))`\
95 {EmCH_{4}}_i &= AD_{FDegBurnData,2019,area,i} \times AGB_{i} \times
CombustFactor \times GWP_{CH_4} \times EF_{CH_4} \times 0.001 \
96 &= \{`r
formatDecimal(MonitoredValues$year1$FDegBurnData$area_ha)`\}\ \
97 - & \times `r formatDecimal(AGB)` \
98 + & \times \{`r formatDecimal(AGB)`\}\ \
99 & \times `r formatDecimal(CombustFactor)`
100 \times `r GWPCH4` \times `r EFCH4` \times `r 0.001` \
101 \sum {EmCH_{4}}_i &= `r sum(MonitoredValues$year1$FDegBurnData$area_ha *
AGB * CombustFactor * GWPCH4 * EFCH4 * 0.001)` \
102 {EmN_{2}O}_i &= AD_{FDegBurnData,2019,area,i} \times AGB_{i} \times
CombustFactor \times GWP_{N_2O} \times EF_{N_2O} \times 0.001 \
103 &= \{`r
formatDecimal(MonitoredValues$year1$FDegBurnData$area_ha)`\}\ \
104 - & \times `r formatDecimal(AGB)` \
105 + & \times \{`r formatDecimal(AGB)`\}\ \
106 & \times `r formatDecimal(CombustFactor)`
107 \times `r GWPN2O` \times `r EFN2O` \times `r 0.001` \
108 \sum {EmN_{2}O}_i &= `r sum(MonitoredValues$year1$FDegBurnData$area_ha *
AGB * CombustFactor * GWPN2O * EFN2O * 0.001)` \
109 ER_{FSW,2019}&= \sum EmCO_2AGB_{i} + \sum EmCO_2BGB_{i} + \sum
{EmCH_{4}}_i + \sum {EmN_{2}O}_i \
110 &= `r sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB
* CombustFactor * GWPCO2 * EFCO2 * 0.001)`
111 - + `r sum(MonitoredValues$year1$FDegBurnData$area_ha * BGB
* CombustFactor * GWPCO2 * EFCO2 * 0.001)`
112 + + `r
sum(ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha * BGB))`
113 + `r sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB
* CombustFactor * GWPCH4 * EFCH4 * 0.001)`
114 + `r sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB
* CombustFactor * GWPN2O * EFN2O * 0.001)` \
115 - &= `r sum(MonitoredValues$year1$FDegBurnData$area_ha *
AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +
sum(MonitoredValues$year1$FDegBurnData$area_ha * BGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) + sum(MonitoredValues$year1$FDegBurnData$area_ha
* AGB * CombustFactor * GWPCH4 * EFCH4 * 0.001) +
sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPN2O * EFN2O * 0.001)` \
116 + &= `r sum(MonitoredValues$year1$FDegBurnData$area_ha *
AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +
117 +
sum(ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha * BGB)) +
118 + sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPCH4 * EFCH4 * 0.001) +

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119 + sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPN20 * EFN20 * 0.001)` \\
120 \end{align}
121 $$
122
123 @@ -289,13 +293,13 @@ EFCH4
124 EFN20
125
126 # Estimate AGB
127 -AGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (MAIBsw / (1 +
RootToShootDryLandSmall))
128 +AGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (MAIBsw * (1 -
RootToShootDryLandSmall))
129 # Estimate BGB
130 BGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (MAIBsw *
RootToShootDryLandSmall)
131 # CO2 ABG emissions
132 EmCO2AGB <- MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPCO2 * EFCO2 * 0.001
133 # CO2 BGB emissions
134 -EmCO2BGB <- MonitoredValues$year1$FDegBurnData$area_ha * BGB *
CombustFactor * GWPCO2 * EFCO2 * 0.001
135 +EmCO2BGB <- ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha
* BGB)
136 # CH4 ABG emissions
137 EmCH4 <- MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPCH4 * EFCH4 * 0.001
138 # N_20 (above-ground biomass)
139 @@ -303,17 +307,25 @@ EmN20 <- MonitoredValues$year1$FDegBurnData$area_ha
* AGB * CombustFactor * GWPN
140 # sum emissions for each gas and put into dataframe
141 sum(sum(EmCO2AGB), sum(EmCO2BGB), sum(EmCH4), sum(EmN20))
142
143 -
144 ``
145 ##### Monitoring Period, Year 2019, Total Forest Degradation
146
147 $$
148 \begin{align}
149 ER_{\text{FDeg},2019} &= \text{r ConvCarbonToCO2e}(\text{MonitoredValues\$year1\$FDegFellVol} \\
&\text{* TEF})` \\
150 - + (\text{r ConvCarbonToCO2e}(\text{MonitoredValues\$year1\$FDegFellArea\$area\_ha} * \\
&\text{MonitoredValues\$year1\$FDegFellArea\$age\_yrs * MAICFell}) * -1`) \\
151 + + (\text{r sum}(\text{ConvCarbonToCO2e}(\text{MonitoredValues\$year1\$FDegFellArea\$area\_ha} \\
&\text{* MonitoredValues\$year1\$FDegFellArea\$age\_yrs * MAICFell}) * -1`)) \\
152 + \text{r ConvBiomassToCO2e}(\text{MonitoredValues\$year1\$NFDegArea} * \text{EFNFDeg} * (1 \\
&\text{+ RootToShootTropRain}))` \\
153 - + \text{r sum}(\text{MonitoredValues\$year1\$FDegBurnData\$area\_ha} * \text{AGB} * \\
&\text{CombustFactor * GWPCO2 * EFCO2 * 0.001}) + \\
&\text{sum}(\text{MonitoredValues\$year1\$FDegBurnData\$area\_ha} * \text{BGB} * \text{CombustFactor *} \\
&\text{GWPCO2 * EFCO2 * 0.001}) + \text{sum}(\text{MonitoredValues\$year1\$FDegBurnData\$area\_ha} \\
&\text{* AGB * CombustFactor * GWPCH4 * EFCH4 * 0.001}) + \\
&\text{sum}(\text{MonitoredValues\$year1\$FDegBurnData\$area\_ha} * \text{AGB} * \text{CombustFactor *} \\
&\text{GWPN20 * EFN20 * 0.001})` \\
154 - &= \text{r formatDecimal}(\text{ConvCarbonToCO2e}(\text{MonitoredValues\$year1\$FDegFellVol}

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* TEF) + ( ConvCarbonToCO2e(MonitoredValues$year1$FDegFellArea$area_ha *
MonitoredValues$year1$FDegFellArea$age_yrs * MAICFell) * -1) +
ConvBiomassToCO2e(MonitoredValues$year1$NFDegArea * EFNFDeg * (1 +
RootToShootTropRain))) + sum(MonitoredValues$year1$FDegBurnData$area_ha *
AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +
sum(MonitoredValues$year1$FDegBurnData$area_ha * BGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) + sum(MonitoredValues$year1$FDegBurnData$area_ha
* AGB * CombustFactor * GWPCH4 * EFCH4 * 0.001) +
sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPN20 * EFN20 * 0.001))`
155 + + `r sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPCO2 * EFCO2 * 0.001) +
156 + sum(ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha *
BGB)) +
157 + sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
158 + sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPN20 * EFN20 * 0.001)` \\
159 + &= `r formatDecimal(ConvCarbonToCO2e(MonitoredValues$year1$FDegFellVol
* TEF) +
160 + sum(ConvCarbonToCO2e(MonitoredValues$year1$FDegFellArea$area_ha *
MonitoredValues$year1$FDegFellArea$age_yrs * MAICFell) * -1) +
161 + sum(ConvBiomassToCO2e(MonitoredValues$year1$NFDegArea * EFNFDeg * (1 +
RootToShootTropRain))) +
162 + sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
163 + sum(ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha *
BGB)) +
164 + sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
165 + sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPN20 * EFN20 * 0.001))`
166 \end{align}
167 $$
168
169 @@ -321,10 +333,10 @@ $$
170 ``{r echo = TRUE, prompt = FALSE}
171
172 ER_FDEG_2019 <- ConvCarbonToCO2e(MonitoredValues$year1$FDegFellVol * TEF) +
173 -(ConvCarbonToCO2e(MonitoredValues$year1$FDegFellArea$area_ha *
MonitoredValues$year1$FDegFellArea$age_yrs * MAICFell) * -1) +
174 +sum(ConvCarbonToCO2e(MonitoredValues$year1$FDegFellArea$area_ha *
MonitoredValues$year1$FDegFellArea$age_yrs * MAICFell) * -1) +
175 ConvBiomassToCO2e(MonitoredValues$year1$NFDegArea * EFNFDeg * (1 +
RootToShootTropRain)) +
176 sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
177 -sum(MonitoredValues$year1$FDegBurnData$area_ha * BGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
178 +sum(ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha * BGB)) +
179 sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
180 sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPN20 * EFN20 * 0.001)
181 ER_FDEG_2019

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182 diff --git a/reports/Fiji_ER_MonitoringReportExtraTables-2019.html
b/reports/Fiji_ER_MonitoringReportExtraTables-2019.html
183 index 99e4e9a..0b5ce7b 100644
184 --- a/reports/Fiji_ER_MonitoringReportExtraTables-2019.html
185 +++ b/reports/Fiji_ER_MonitoringReportExtraTables-2019.html
186 @@ -566,7 +566,7 @@ pre code {
187
188
189 <h1 class="title toc-ignore">Monitoring Report Extra Tables</h1>
190 -<h4 class="date">15 December, 2023</h4>
191 +<h4 class="date">06 February, 2024</h4>
192
193 </div>
194
195 @@ -859,40 +859,41 @@ GWP_{N_20} &= 265 \\
196 EF_{CO_2} &= 1580 \\
197 EF_{CH_4} &= 6.8 \\
198 EF_{N_20} &= 0.2 \\
199 -AGB_{i} &= AD_{FDegBurnData,2019,age,i} \times \frac{MAIB_{sw}}{1 + \sqrt{2, 3, 4, 2, 2, 2, 5, 2, 2, 2, 3}} \times \frac{10}{1 + 0.2} \\
200 - &= \sqrt{2, 3, 4, 2, 2, 2, 5, 2, 2, 2, 3} \times \frac{10}{1 + 0.2} \\
201 +AGB_{i} &= AD_{FDegBurnData,2019,age,i} \times MAIB_{sw} \times (1 - \sqrt{2, 3, 4, 2, 2, 2, 5, 2, 2, 2, 3}) \times 10 \times (1 - 0.2) \\
202 + &= \sqrt{2, 3, 4, 2, 2, 2, 5, 2, 2, 2, 3} \times 10 \times (1 - 0.2) \\
203 + &= \sqrt{16, 24, 32, 16, 16, 40, 16, 16, 16, 24} \\
204 BGB_{i} &= AD_{FDegBurnData,2019,age,i} \times MAIB_{sw} \times \sqrt{2, 3, 4, 2, 2, 2, 5, 2, 2, 2, 3} \times 10 \times 0.2 \\
205 + &= \sqrt{4, 6, 8, 4, 4, 4, 10, 4, 4, 4, 6} \\
206 EmCO_2AGB_{i} &= AD_{FDegBurnData,2019,area,i} \times AGB_{i} \times CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \\
207 &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
208 - &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
209 - &= \{10.00, 4.00, 6.00, 8.00, 4.00, 4.00, 4.00, 10.00, 4.00, 4.00, 6.00\} \\
210 + &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
211 &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
212 - &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
213 -\sum EmCO_2AGB_{i} &= 2551.54042 \\
214 -EmCO_2BGB_{i} &= AD_{FDegBurnData,2019,area,i} \times BGB_{i} \times CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \\
215 +\sum EmCO_2AGB_{i} &= 2449.4788032 \\
216 +EmCO_2BGB_{i} &= AD_{FDegBurnData,2019,area,i} \times BGB_{i} \times CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \\
217 &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
218 - &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
219 - &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
220 - &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\} \\
221 -\sum EmCO_2BGB_{i} &= 612.3697008 \\
222 + &= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, 57.64, 17.31, 4.71, 20.42\}

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223 + & \times 0.47 \times \frac{44}{12} \\
224 + \sum \text{EmCO\_2BGB}_{\{i\}} \&= 1452.00484 \\
225 \{ \text{EmCH}_{\{4\}} \}_i \&= \text{AD}_{\{\text{FDegBurnData}, 2019, \text{area}, i\}} \times \text{AGB}_{\{i\}} \quad \varnothing \\
\& \times \text{CombustFactor} \times \text{GWP}_{\{\text{CH}_4\}} \times \text{EF}_{\{\text{CH}_4\}} \times 0.001 \\
226 \&= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, \quad \varnothing \\
57.64, 17.31, 4.71, 20.42\} \\
227 - \& \times 16.67, 25.00, 33.33, 16.67, 16.67, 16.67, \quad \varnothing \\
41.67, 16.67, 16.67, 16.67, 25.00 \\
228 + \& \times \{16.00, 24.00, 32.00, 16.00, 16.00, 16.00, \quad \varnothing \\
40.00, 16.00, 16.00, 16.00, 24.00\} \\
229 \& \times 0.46 \\
230 \times 28 \times 6.8 \times 0.001 \\
231 - \sum \{ \text{EmCH}_{\{4\}} \}_i \&= 307.4767696 \\
232 + \sum \{ \text{EmCH}_{\{4\}} \}_i \&= 295.1776988 \\
233 \{ \text{EmN}_{\{2\}0} \}_i \&= \text{AD}_{\{\text{FDegBurnData}, 2019, \text{area}, i\}} \times \text{AGB}_{\{i\}} \quad \varnothing \\
\& \times \text{CombustFactor} \times \text{GWP}_{\{\text{N}_2\text{O}\}} \times \text{EF}_{\{\text{N}_2\text{O}\}} \times 0.001 \\
234 \&= \{10.00, 3.00, 3.00, 2.00, 49.00, 0.60, 11.30, \quad \varnothing \\
57.64, 17.31, 4.71, 20.42\} \\
235 - \& \times 16.67, 25.00, 33.33, 16.67, 16.67, 16.67, \quad \varnothing \\
41.67, 16.67, 16.67, 16.67, 25.00 \\
236 + \& \times \{16.00, 24.00, 32.00, 16.00, 16.00, 16.00, \quad \varnothing \\
40.00, 16.00, 16.00, 16.00, 24.00\} \\
237 \& \times 0.46 \\
238 \times 265 \times 0.2 \times 0.001 \\
239 - \sum \{ \text{EmN}_{\{2\}0} \}_i \&= 85.589647 \\
240 + \sum \{ \text{EmN}_{\{2\}0} \}_i \&= 82.1660611 \\
241 \text{ER}_{\{\text{FSW}, 2019\}} \&= \sum \text{EmCO\_2AGB}_{\{i\}} + \sum \text{EmCO\_2BGB}_{\{i\}} + \sum \quad \varnothing \\
\{ \text{EmCH}_{\{4\}} \}_i + \sum \{ \text{EmN}_{\{2\}0} \}_i \\
242 - \&= 2551.54042 \\
243 - + 612.3697008 \\
244 - + 307.4767696 \\
245 - + 85.589647 \\
246 - \&= 3556.9765374 \\
247 + \&= 2449.4788032 \\
248 + + 1452.00484 \\
249 + + 295.1776988 \\
250 + + 82.1660611 \\
251 + \&= 4278.8274031 \\
252 \end{pre>


253 \]



```

254 <pre class="r"><code>>
MonitoredValues$year1$FDegBurnData$age_yrs</code></pre>
255 @@ -918,20 +919,20 @@ \text{ER}_{\{\text{FSW}, 2019\}} \&= \sum \text{EmCO_2AGB}_{\{i\}} + \sum \quad \varnothing \\
\text{EmCO_2BGB}_{\{i\}} + \sum \{ \text{EmCH}_{\{4\}} \}_i \\
256 <pre class="r"><code>> \text{EFN20}</code></pre>
257 <pre><code>## [1] 0.2</code></pre>
258 <pre class="r"><code>> # Estimate AGB
259 -> AGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (\text{MAIBsw} / (1 \quad \varnothing \\
+ \text{RootToShootDryLandSmall})) \\
260 +> AGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (\text{MAIBsw} * (1 \quad \varnothing \\
- \text{RootToShootDryLandSmall})) \\
261 > # Estimate BGB
262 > BGB <- MonitoredValues$year1$FDegBurnData$age_yrs * (\text{MAIBsw} * \quad \varnothing \\
\text{RootToShootDryLandSmall}) \\
263 > # CO2 ABG emissions

```


```

```

264 > EmCO2AGB <- MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPCO2 * EFCO2 * 0.001
265 > # CO2 BGB emissions
266 -> EmCO2BGB <- MonitoredValues$year1$FDegBurnData$area_ha * BGB *
CombustFactor * GWPCO2 * EFCO2 * 0.001
267 +> EmCO2BGB <-
ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha * BGB)
268 > # CH4 ABG emissions
269 > EmCH4 <- MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPCH4 * EFCH4 * 0.001
270 > # N_2O (above-ground biomass)
271 > EmN2O <- MonitoredValues$year1$FDegBurnData$area_ha * AGB *
CombustFactor * GWPN2O * EFN2O * 0.001
272 > # sum emissions for each gas and put into dataframe
273 > sum(sum(EmCO2AGB), sum(EmCO2BGB), sum(EmCH4), sum(EmN2O))</code></pre>
274 -<pre><code>## [1] 3556.977</code></pre>
275 +<pre><code>## [1] 4278.827</code></pre>
276 </div>
277 <div id="monitoring-period-year-2019-total-forest-degradation"
class="section level4">
278 <h4>Monitoring Period, Year 2019, Total Forest Degradation</h4>
279 @@ -940,19 +941,19 @@ ER_{FSW,2019}&#226;= \sum EmCO_2AGB_{i} + \sum
EmCO_2BGB_{i} + \sum {EmCH_{4}}_
280 ER_{FDeg,2019} &#226;= 1.0619455\times 10^{5}
281 + (-2450.25)
282 + 3.5792828\times 10^{4}
283 - + 3556.9765374 \\\
284 - &#226;= 143094.10
285 + + 4278.8274031 \\\
286 + &#226;= 143815.96
287 \end{align}
288 \]</span></p>
289 <pre class="r"><code>ER_FDEG_2019 <-
ConvCarbonToCO2e(MonitoredValues$year1$FDegFellVol * TEF) +
290 -(ConvCarbonToCO2e(MonitoredValues$year1$FDegFellArea$area_ha *
MonitoredValues$year1$FDegFellArea$age_yrs * MAICFell) * -1) +
291 +sum(ConvCarbonToCO2e(MonitoredValues$year1$FDegFellArea$area_ha *
MonitoredValues$year1$FDegFellArea$age_yrs * MAICFell) * -1) +
292 ConvBiomassToCO2e(MonitoredValues$year1$NFDegArea * EFNFDeg * (1 +
RootToShootTropRain)) +
293 sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
294 -sum(MonitoredValues$year1$FDegBurnData$area_ha * BGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
295 +sum(ConvBiomassToCO2e(MonitoredValues$year1$FDegBurnData$area_ha * BGB)) +
296 sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001) +
297 sum(MonitoredValues$year1$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCO2 * EFCO2 * 0.001)
298 ER_FDEG_2019</code></pre>
299 -<pre><code>## [1] 143094.1</code></pre>
300 +<pre><code>## [1] 143816</code></pre>
301 </div>
302 </div>
303 <div id="removals-by-enhancements" class="section level3">

```



```

304 @@ -1208,8 +1209,8 @@ ER_{Enh,2019} &= 5.1275008\times 10^{5} +
(-2967.6123297) \\\
305 <p><span class="math display">\[
306 \begin{align}
307 ER_{2019} &= ER_{DeFor,2019} + ER_{FDeg,2019} + ER_{Enh,2019} \\\
308 - &= 6.6331104\times 10^{4} + 1.430941\times 10^{5} +
5.0978247\times 10^{5} \\\
309 - &= 7.1920768\times 10^{5}
310 + &= 6.6331104\times 10^{4} + 1.4381596\times 10^{5} +
5.0978247\times 10^{5} \\\
311 + &= 7.1992953\times 10^{5}
312 \end{align}
313 \]
```

diff --git a/reports/Fiji_ER_MonitoringReportExtraTables-2020.Rmd
b/reports/Fiji_ER_MonitoringReportExtraTables-2020.Rmd
index f4a3ef6..8117e9e 100644
--- a/reports/Fiji_ER_MonitoringReportExtraTables-2020.Rmd
+++ b/reports/Fiji_ER_MonitoringReportExtraTables-2020.Rmd

```

319 @@ -180,8 +180,7 @@ $$
320 %
321 \end{align}
322 $$
323 -
324 -MGG - NOTE check with carly
325 +
326
327 ```{r echo = TRUE, prompt = TRUE}
328 MonitoredValues$year2$FDegFellArea$area_ha
329 @@ -217,7 +216,7 @@ ConvBiomassToCO2e(MonitoredValues$year2$NFDegArea *
EFNFDeg * (1 + RootToShootTr
330 ##### Monitoring Period, Year 2020, Forest Degradation from softwood fire
331 ```{r echo = FALSE, prompt = FALSE}
332 # Estimate AGB
333 -AGB <- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw / (1 +
RootToShootDryLandSmall))
334 +AGB <- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw * (1 -
RootToShootDryLandSmall))
335 # Estimate BGB
336 BGB <- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw *
RootToShootDryLandSmall)
337 ```
338 @@ -235,40 +234,44 @@ GWP_{N_20} &= `r GWP_N20` \\\
339 EF_{CO_2} &= `r EFCO2` \\\
340 EF_{CH_4} &= `r EFCH4` \\\
341 EF_{N_20} &= `r EFN20` \\\
342 -AGB_{i} &= AD_{FDegBurnData,2020,age,i} \times \frac{MAIB_{sw}}{1 +
RootToShootRatio_{dll}} \\\
343 - &= \{`r MonitoredValues$year2$FDegBurnData$age_yrs`\} \times
\frac{`r MAIBsw`}{1 + `r RootToShootDryLandSmall`} \\\
344 +AGB_{i} &= AD_{FDegBurnData,2020,age,i} \times MAIB_{sw} \times (1 -
RootToShootRatio_{dll}) \\\
345 + &= \{`r MonitoredValues$year2$FDegBurnData$age_yrs`\} \times `r
MAIBsw` \times (1 - `r RootToShootDryLandSmall`) \\\

```

```

346 + &= \{\`r MonitoredValues$year2$FDegBurnData$age_yrs * MAIBsw * (1 -  ↵
RootToShootDryLandSmall)\}\ \
347 BGB_{i} &= AD_{FDegBurnData,2020,age,i} \times MAIB_{sw} \times  ↵
RootToShootRatio_{dll} \
348 &= \{\`r MonitoredValues$year2$FDegBurnData$age_yrs\}\ \times \`r  ↵
MAIBsw \times \`r RootToShootDryLandSmall \
349 + &= \{\`r MonitoredValues$year2$FDegBurnData$age_yrs * MAIBsw *  ↵
RootToShootDryLandSmall\}\ \
350 EmCO_2AGB_{i} &= AD_{FDegBurnData,2020,area,i} \times AGB_{i} \times  ↵
CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \
351 &= \{\`r  ↵
formatDecimal(MonitoredValues$year2$FDegBurnData$area_ha)\}\ \
352 - & \times \`r formatDecimal(AGB)\ \  ↵
353 + & \times \{\`r formatDecimal(AGB)\}\ \  ↵
354 & \times \`r formatDecimal(CombustFactor)\  ↵
355 \times \`r GWPCO2 \times \`r EFCO2 \times \`r 0.001 \ \  ↵
356 \sum EmCO_2AGB_{i} &= \`r sum(MonitoredValues$year2$FDegBurnData$area_ha  ↵
* AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001)\ \
357 -EmCO_2BGB_{i} &= AD_{FDegBurnData,2020,area,i} \times BGB_{i} \times  ↵
CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \
358 +EmCO_2BGB_{i} &= AD_{FDegBurnData,2020,area,i} \times BGB_{i} \times  ↵
0.47 \times \frac{44}{12} \
359 &= \{\`r  ↵
formatDecimal(MonitoredValues$year2$FDegBurnData$area_ha)\}\ \
360 - & \times \`r formatDecimal(BGB)\ \  ↵
361 - & \times \`r formatDecimal(CombustFactor)\  ↵
362 - \times \`r GWPCO2 \times \`r EFCO2 \times \`r 0.001 \ \  ↵
363 -\sum EmCO_2BGB_{i} &= \`r sum(MonitoredValues$year2$FDegBurnData$area_ha  ↵
* BGB * CombustFactor * GWPCO2 * EFCO2 * 0.001)\ \
364 + & \times \{\`r formatDecimal(BGB)\}\ \  ↵
365 + & \times 0.47 \times \frac{44}{12} \ \  ↵
366 +\sum EmCO_2BGB_{i} &= \`r  ↵
ConvBiomassToCO2e(sum(MonitoredValues$year2$FDegBurnData$area_ha * BGB))\ \
367 {EmCH_{4}}_i &= AD_{FDegBurnData,2020,area,i} \times AGB_{i} \times  ↵
CombustFactor \times GWP_{CH_4} \times EF_{CH_4} \times 0.001 \
368 &= \{\`r  ↵
formatDecimal(MonitoredValues$year2$FDegBurnData$area_ha)\}\ \
369 - & \times \`r formatDecimal(AGB)\ \  ↵
370 + & \times \{\`r formatDecimal(AGB)\}\ \  ↵
371 & \times \`r formatDecimal(CombustFactor)\  ↵
372 \times \`r GWPC_{CH_4} \times \`r EF_{CH_4} \times \`r 0.001 \ \  ↵
373 \sum {EmCH_{4}}_i &= \`r sum(MonitoredValues$year2$FDegBurnData$area_ha *  ↵
AGB * CombustFactor * GWPC_{CH_4} * EF_{CH_4} * 0.001)\ \
374 {EmN_{2}O}_i &= AD_{FDegBurnData,2020,area,i} \times AGB_{i} \times  ↵
CombustFactor \times GWP_{N_2O} \times EF_{N_2O} \times 0.001 \
375 &= \{\`r  ↵
formatDecimal(MonitoredValues$year2$FDegBurnData$area_ha)\}\ \
376 - & \times \`r formatDecimal(AGB)\ \  ↵
377 + & \times \{\`r formatDecimal(AGB)\}\ \  ↵
378 & \times \`r formatDecimal(CombustFactor)\  ↵
379 \times \`r GWPN_{2O} \times \`r EFN_{2O} \times \`r 0.001 \ \  ↵
380 \sum {EmN_{2}O}_i &= \`r sum(MonitoredValues$year2$FDegBurnData$area_ha *  ↵
AGB * CombustFactor * GWPN_{2O} * EFN_{2O} * 0.001)\ \
381 ER_{FSW,2020}&= \sum EmCO_2AGB_{i} + \sum EmCO_2BGB_{i} + \sum  ↵
{EmCH_{4}}_i + \sum {EmN_{2}O}_i \

```

```

382      &= `r sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB      ↵
* CombustFactor * GWPCO2 * EFCO2 * 0.001)`
383 - + `r sum(MonitoredValues$year2$FDegBurnData$area_ha * BGB      ↵
* CombustFactor * GWPCO2 * EFCO2 * 0.001)`
384 + + `r      ↵
sum(ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha * BGB))`
385 + `r sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB      ↵
* CombustFactor * GWPCO2 * EFCO2 * 0.001)`
386 + `r sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB      ↵
* CombustFactor * GWPN20 * EFN20 * 0.001)` \\
387 - &= `r sum(MonitoredValues$year2$FDegBurnData$area_ha *      ↵
AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +      ↵
sum(MonitoredValues$year2$FDegBurnData$area_ha * BGB * CombustFactor *      ↵
GWPCO2 * EFCO2 * 0.001) + sum(MonitoredValues$year2$FDegBurnData$area_ha      ↵
* AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +      ↵
sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *      ↵
GWPN20 * EFN20 * 0.001)` \\
388 + &= `r sum(MonitoredValues$year2$FDegBurnData$area_ha *      ↵
AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +      ↵
389 +      ↵
sum(ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha * BGB)) +      ↵
390 + sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB *      ↵
CombustFactor * GWPCO2 * EFCO2 * 0.001) +      ↵
391 + sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB *      ↵
CombustFactor * GWPN20 * EFN20 * 0.001)` \\
392 \end{align}
393 $$
394
395 @@ -290,13 +293,13 @@ EFCH4
396 EFN20
397
398 # Estimate AGB
399 -AGB <- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw / (1 +      ↵
RootToShootDryLandSmall))
400 +AGB <- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw * (1 -      ↵
RootToShootDryLandSmall))
401 # Estimate BGB
402 BGB <- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw *      ↵
RootToShootDryLandSmall)
403 # CO2 ABG emissions
404 EmCO2AGB <- MonitoredValues$year2$FDegBurnData$area_ha * AGB *      ↵
CombustFactor * GWPCO2 * EFCO2 * 0.001
405 # CO2 BGB emissions
406 -EmCO2BGB <- MonitoredValues$year2$FDegBurnData$area_ha * BGB *      ↵
CombustFactor * GWPCO2 * EFCO2 * 0.001
407 +EmCO2BGB <- ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha      ↵
* BGB)
408 # CH4 ABG emissions
409 EmCH4 <- MonitoredValues$year2$FDegBurnData$area_ha * AGB *      ↵
CombustFactor * GWPCO2 * EFCH4 * 0.001
410 # N_20 (above-ground biomass)
411 @@ -311,14 +314,15 @@ sum(sum(EmCO2AGB), sum(EmCO2BGB), sum(EmCH4),      ↵
sum(EmN20))
412 $$
413 \begin{align}

```

```

414   ER_{FDeg,2020} &= `r ConvCarbonToCO2e(MonitoredValues$year2$FDegFellVol
    * TEF)`
415   - + (`r ConvCarbonToCO2e(MonitoredValues$year2$FDegFellArea$area_ha *
    MonitoredValues$year2$FDegFellArea$age_yrs * MAICFell) * -1`)
416   + + (`r sum(ConvCarbonToCO2e(MonitoredValues$year2$FDegFellArea$area_ha
    * MonitoredValues$year2$FDegFellArea$age_yrs * MAICFell) * -1)`)
417   + `r ConvBiomassToCO2e(MonitoredValues$year2$NFDegArea * EFNFDeg * (1
    + RootToShootTropRain))`
418   - + `r sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB *
    CombustFactor * GWPCO2 * EFCO2 * 0.001) +
    sum(MonitoredValues$year2$FDegBurnData$area_ha * BGB * CombustFactor *
    GWPCO2 * EFCO2 * 0.001) + sum(MonitoredValues$year2$FDegBurnData$area_ha
    * AGB * CombustFactor * GWPCH4 * EFCH4 * 0.001) +
    sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *
    GWPN20 * EFN20 * 0.001)` \\
419   - &= `r formatDecimal(ConvCarbonToCO2e(MonitoredValues$year2$FDegFellVol
    * TEF) + ( ConvCarbonToCO2e(MonitoredValues$year2$FDegFellArea$area_ha *
    MonitoredValues$year2$FDegFellArea$age_yrs * MAICFell) * -1) +
    ConvBiomassToCO2e(MonitoredValues$year2$NFDegArea * EFNFDeg * (1 +
    RootToShootTropRain)) + sum(MonitoredValues$year2$FDegBurnData$area_ha *
    AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +
    sum(MonitoredValues$year2$FDegBurnData$area_ha * BGB * CombustFactor *
    GWPCO2 * EFCO2 * 0.001) + sum(MonitoredValues$year2$FDegBurnData$area_ha
    * AGB * CombustFactor * GWPCH4 * EFCH4 * 0.001) +
    sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *
    GWPN20 * EFN20 * 0.001))`
420   + + `r sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB *
    CombustFactor * GWPCO2 * EFCO2 * 0.001) +
    sum(ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha * BGB))
    + sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *
    GWPCH4 * EFCH4 * 0.001) + sum(MonitoredValues$year2$FDegBurnData$area_ha
    * AGB * CombustFactor * GWPN20 * EFN20 * 0.001)` \\
421   + &= `r formatDecimal(ConvCarbonToCO2e(MonitoredValues$year2$FDegFellVol
    * TEF) +
422   + sum(ConvCarbonToCO2e(MonitoredValues$year2$FDegFellArea$area_ha *
    MonitoredValues$year2$FDegFellArea$age_yrs * MAICFell) * -1) +
423   + ConvBiomassToCO2e(MonitoredValues$year2$NFDegArea * EFNFDeg * (1 +
    RootToShootTropRain)) + sum(MonitoredValues$year2$FDegBurnData$area_ha *
    AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001) +
    sum(ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha * BGB))
    + sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *
    GWPCH4 * EFCH4 * 0.001) + sum(MonitoredValues$year2$FDegBurnData$area_ha
    * AGB * CombustFactor * GWPN20 * EFN20 * 0.001))`
424   \end{align}
425   $$
426
427   -MGG - NOTE check with carly
428
429   ```{r echo = TRUE, prompt = FALSE}
430
431   @@ -326,7 +330,7 @@ ER_FDEG_2020 <-
    ConvCarbonToCO2e(MonitoredValues$year2$FDegFellVol * TEF) +
432     sum(ConvCarbonToCO2e(MonitoredValues$year2$FDegFellArea$area_ha *
    MonitoredValues$year2$FDegFellArea$age_yrs * MAICFell) * -1) +
433     ConvBiomassToCO2e(MonitoredValues$year2$NFDegArea * EFNFDeg * (1 +

```

```

RootToShootTropRain)) +
434   sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *      ↵
GWPCO2 * EFCO2 * 0.001) +
435   -sum(MonitoredValues$year2$FDegBurnData$area_ha * BGB * CombustFactor *      ↵
GWPCO2 * EFCO2 * 0.001) +
436   +sum(ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha * BGB)) +
437   sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *      ↵
GWPCO2 * EFCO2 * 0.001) +
438   sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *      ↵
GWPN20 * EFN20 * 0.001)
439   ER_FDEG_2020
440   @@ -400,7 +404,6 @@ Rem_{FPIn,2020,Hardwood} &=      ↵
AD_{FPIn,2020,age,Hardwood} \times AD_{FPIn,2020,ar
441   \end{align}
442   $$
443
444   -MGG - NOTE check with carly
445
446   ```{r echo = TRUE, prompt = TRUE}
447   #' Forest Plantations - Removals from Hardwood Plantations
448   @@ -492,7 +495,6 @@ Rem_{FPIn,2020,Softwood}      &=      ↵
AD_{FPIn,2020,age,Softwood}
449   \end{align}
450   $$
451
452   -MGG - NOTE check with carly
453
454   ```{r echo = TRUE, prompt = TRUE}
455   #' Forest Plantations - Removals from Softwood Plantations
456   @@ -563,7 +565,6 @@ Rem_{AR,2020}      &= AD_{AR,2020,age} \times      ↵
AD_{AR,2020,area} \times MAIC_{AR} \ti
457   \end{align}
458   $$
459
460   -MGG - NOTE check with carly
461
462   ```{r echo = TRUE, prompt = TRUE}
463   MonitoredValues$year2$AReforArea$age_yrs
464   diff --git a/reports/Fiji_ER_MonitoringReportExtraTables-2020.html      ↵
b/reports/Fiji_ER_MonitoringReportExtraTables-2020.html
465   index 21cf318..74625f5 100644
466   --- a/reports/Fiji_ER_MonitoringReportExtraTables-2020.html
467   +++ b/reports/Fiji_ER_MonitoringReportExtraTables-2020.html
468   @@ -566,7 +566,7 @@ pre code {
469
470
471   <h1 class="title toc-ignore">Monitoring Report Extra Tables</h1>
472   -<h4 class="date">15 December, 2023</h4>
473   +<h4 class="date">06 February, 2024</h4>
474
475   </div>
476
477   @@ -811,7 +811,6 @@ ER_{NFH,2020,vol}      &= AD_{NFH,2020,vol} \times      ↵
EF_{NFHvol} \times \frac{44}{
478   %

```

```

479 \end{align}
480 \]
```

481 -<p>MGG - NOTE check with carly</p>

```

482 <pre class="r"><code>&gt;
MonitoredValues$year2$FDegFellArea$area_ha</code></pre>
483 <pre><code>## [1] 1350 1083</code></pre>
484 <pre class="r"><code>&gt;
MonitoredValues$year2$FDegFellArea$age_yrs</code></pre>
485 @@ -862,40 +861,41 @@ GWP_{N_20} &= 265 \\
486 EF_{CO_2} &= 1580 \\
487 EF_{CH_4} &= 6.8 \\
488 EF_{N_20} &= 0.2 \\
489 -AGB_{i} &= AD_{FDegBurnData,2020,age,i} \times \frac{MAIB_{sw}}{1 + \sqrt{RootToShootRatio_{dll}}} \\
490 - &= \{3, 3, 3, 3, 4, 2, 2, 2, 2, 3, 2\} \times \frac{10}{1 + 0.2} \\
491 +AGB_{i} &= AD_{FDegBurnData,2020,age,i} \times MAIB_{sw} \times (1 - \sqrt{RootToShootRatio_{dll}}) \\
492 + &= \{3, 3, 3, 3, 4, 2, 2, 2, 2, 3, 2\} \times 10 \times (1 - 0.2) \\
493 + &= \{24, 24, 24, 24, 32, 16, 16, 16, 16, 24, 16\} \\
494 BGB_{i} &= AD_{FDegBurnData,2020,age,i} \times MAIB_{sw} \times \sqrt{RootToShootRatio_{dll}} \\
495 &= \{3, 3, 3, 3, 4, 2, 2, 2, 2, 3, 2\} \times 10 \times 0.2 \\
496 + &= \{6, 6, 6, 6, 8, 4, 4, 4, 4, 6, 4\} \\
497 EmCO_2AGB_{i} &= AD_{FDegBurnData,2020,area,i} \times AGB_{i} \times CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \\
498 &= \{8.25, 39.20, 12.10, 25.90, 33.40, 4.00, 9.86, 4.56, 10.77, 13.00, 13.00\} \\
499 - & \times \{25.00, 25.00, 25.00, 25.00, 33.33, 16.67, 16.67, 16.67, 25.00, 16.67\} \\
500 + & \times \{24.00, 24.00, 24.00, 24.00, 32.00, 16.00, 16.00, 16.00, 24.00, 16.00\} \\
501 & \times 0.46 \\
502 & \times 1 \times 1580 \times 0.001 \\
503 -\sum EmCO_2AGB_{i} &= 3109.0687 \\
504 -EmCO_2BGB_{i} &= AD_{FDegBurnData,2020,area,i} \times BGB_{i} \times CombustFactor \times GWP_{CO_2} \times EF_{CO_2} \times 0.001 \\
505 +\sum EmCO_2AGB_{i} &= 2984.705952 \\
506 +EmCO_2BGB_{i} &= AD_{FDegBurnData,2020,area,i} \times BGB_{i} \times 0.47 \times \frac{44}{12} \\
507 &= \{8.25, 39.20, 12.10, 25.90, 33.40, 4.00, 9.86, 4.56, 10.77, 13.00, 13.00\} \\
508 - & \times \{6.00, 6.00, 6.00, 6.00, 8.00, 4.00, 4.00, 4.00, 6.00, 4.00\} \\
509 - & \times 0.46 \\
510 - & \times 1 \times 1580 \times 0.001 \\
511 -\sum EmCO_2BGB_{i} &= 746.176488 \\
512 + & \times \{6.00, 6.00, 6.00, 6.00, 8.00, 4.00, 4.00, 4.00, 6.00, 4.00\} \\
513 + & \times 0.47 \times \frac{44}{12} \\
514 +\sum EmCO_2BGB_{i} &= 1769.2774 \\
515 {EmCH_4}_i &= AD_{FDegBurnData,2020,area,i} \times AGB_{i} \times CombustFactor \times GWP_{CH_4} \times EF_{CH_4} \times 0.001 \\
516 &= \{8.25, 39.20, 12.10, 25.90, 33.40, 4.00, 9.86, 4.56, 10.77, 13.00, 13.00\}

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517 - & \times 25.00, 25.00, 25.00, 25.00, 33.33, 16.67, 16.67, 16.67, 16.67, 25.00, 16.67 \\
518 + & \times \{24.00, 24.00, 24.00, 24.00, 32.00, 16.00, 16.00, 16.00, 16.00, 24.00, 16.00\} \\
519 & \times 0.46 \\
520 & \times 28 \times 6.8 \times 0.001 \\
521 -\sum \{EmCH_{4}\}_i &= 374.662456 \\
522 +\sum \{EmCH_{4}\}_i &= 359.6759578 \\
523 \{EmN_{2}O\}_i &= AD_{\{FDegBurnData,2020,area,i\}} \times AGB_{i} \\
& \times CombustFactor \times GWP_{\{N_{2}O\}} \times EF_{\{N_{2}O\}} \times 0.001 \\
524 &= \{ 8.25, 39.20, 12.10, 25.90, 33.40, 4.00, 9.86, 4.56, 10.77, 13.00, 13.00\} \\
525 - & \times 25.00, 25.00, 25.00, 25.00, 33.33, 16.67, 16.67, 16.67, 16.67, 25.00, 16.67 \\
526 + & \times \{24.00, 24.00, 24.00, 24.00, 32.00, 16.00, 16.00, 16.00, 16.00, 24.00, 16.00\} \\
527 & \times 0.46 \\
528 & \times 265 \times 0.2 \times 0.001 \\
529 -\sum \{EmN_{2}O\}_i &= 104.291545 \\
530 +\sum \{EmN_{2}O\}_i &= 100.1198832 \\
531 ER_{\{FSW,2020\}} &= \sum EmCO_{2}AGB_{i} + \sum EmCO_{2}BGB_{i} + \sum \{EmCH_{4}\}_i + \sum \{EmN_{2}O\}_i \\
532 &= 3109.0687 \\
533 &+ 746.176488 \\
534 &+ 374.662456 \\
535 &+ 104.291545 \\
536 &= 4334.199189 \\
537 &+ 2984.705952 \\
538 &+ 1769.2774 \\
539 &+ 359.6759578 \\
540 &+ 100.1198832 \\
541 &= 5213.779193 \\
542 \end{align} \\
543 \\
544 <pre class="r"><code>&gt; MonitoredValues$year2$FDegBurnData$age_yrs</code></pre>
545 @@ -921,42 +921,41 @@ ER_{FSW,2020}&= \sum EmCO_{2}AGB_{i} + \sum EmCO_{2}BGB_{i} + \sum \{EmCH_{4}\}_i \\
546 <pre class="r"><code>&gt; EFN20</code></pre> \\
547 <pre><code>## [1] 0.2</code></pre> \\
548 <pre class="r"><code>&gt; # Estimate AGB \\
549 -&gt; AGB &lt;- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw / (1 + RootToShootDryLandSmall)) \\
550 +&gt; AGB &lt;- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw * (1 - RootToShootDryLandSmall)) \\
551 &gt; # Estimate BGB \\
552 &gt; BGB &lt;- MonitoredValues$year2$FDegBurnData$age_yrs * (MAIBsw * RootToShootDryLandSmall) \\
553 &gt; # CO2 ABG emissions \\
554 &gt; EmCO2AGB &lt;- MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor * GWPCO2 * EFCO2 * 0.001 \\
555 &gt; # CO2 BGB emissions \\
556 -&gt; EmCO2BGB &lt;- MonitoredValues$year2$FDegBurnData$area_ha * BGB * CombustFactor * GWPCO2 * EFCO2 * 0.001 \\
557 +&gt; EmCO2BGB &lt;-

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558   ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha * BGB)
559   &gt; # CH4 ABG emissions
559   &gt; EmCH4 &lt;- MonitoredValues$year2$FDegBurnData$area_ha * AGB *
CombustFactor * GWPCH4 * EFCH4 * 0.001
560   &gt; # N_2O (above-ground biomass)
561   &gt; EmN2O &lt;- MonitoredValues$year2$FDegBurnData$area_ha * AGB *
CombustFactor * GWPN2O * EFN2O * 0.001
562   &gt; # sum emissions for each gas and put into dataframe
563   &gt; sum(sum(EmCO2AGB), sum(EmCO2BGB), sum(EmCH4), sum(EmN2O))</code></pre>
564   -<pre><code>## [1] 4334.199</code></pre>
565   +<pre><code>## [1] 5213.779</code></pre>
566   </div>
567   <div id="monitoring-period-year-2020-total-forest-degradation"
class="section level4">
568   <h4>Monitoring Period, Year 2020, Total Forest Degradation</h4>
569   <p><span class="math display">\[
570   \begin{align}
571   ER_{FDeg,2020} &= 8.50388 \times 10^4
572   - + (-2450.25, -5896.935)
573   + + (-8347.185)
574   + 3.5792828 \times 10^4
575   - + 4334.199189 \ \
576   - &= 122715.58, 119268.89
577   + + 5213.779193 \ \
578   + &= 117698.22
579   \end{align}
580   \]</span></p>
581   -<p>MGG - NOTE check with carly</p>
582   <pre class="r"><code>ER_FDEG_2020 &lt;-
ConvCarbonToCO2e(MonitoredValues$year2$FDegFellVol * TEF) +
583   sum(ConvCarbonToCO2e(MonitoredValues$year2$FDegFellArea$area_ha *
MonitoredValues$year2$FDegFellArea$age_yrs * MAICFell) * -1) +
584   ConvBiomassToCO2e(MonitoredValues$year2$NFDegArea * EFNFDeg * (1 +
RootToShootTropRain)) +
585   sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCH4 * EFCH4 * 0.001) +
586   -sum(MonitoredValues$year2$FDegBurnData$area_ha * BGB * CombustFactor *
GWPCH4 * EFCH4 * 0.001) +
587   +sum(ConvBiomassToCO2e(MonitoredValues$year2$FDegBurnData$area_ha * BGB)) +
588   sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCH4 * EFCH4 * 0.001) +
589   sum(MonitoredValues$year2$FDegBurnData$area_ha * AGB * CombustFactor *
GWPCH4 * EFCH4 * 0.001)
590   ER_FDEG_2020</code></pre>
591   -<pre><code>## [1] 116818.6</code></pre>
592   +<pre><code>## [1] 117698.2</code></pre>
593   </div>
594   </div>
595   <div id="removals-by-enhancements" class="section level3">
596   @@ -1022,7 +1021,6 @@ Rem_{FPln,2020,Hardwood} &=
AD_{FPln,2020,age,Hardwood} \times AD_{FPln,202
&= -3.0446412 \times 10^4, 0
597   &= -3.0446412 \times 10^4, 0
598   \end{align}
599   \]</span></p>
600   -<p>MGG - NOTE check with carly</p>

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601 <pre class="r"><code>&gt; #' Forest Plantations - Removals from Hardwood
Plantations
602 &gt; MonitoredValues$year2$FPlnAreaPlantHwd$area_ha</code></pre>
603 <pre><code>## [1] 4008 0</code></pre>
604 @@ -1112,7 +1110,6 @@ Rem_{FPln,2020,Softwood} &=
AD_{FPln,2020,age,Softwood}
605 &= -1.7302267\times 10^4,
-4.93735\times 10^4}
606 \end{align}
607 \]</p>
608 -<p>MGG - NOTE check with carly</p>
609 <pre class="r"><code>&gt; #' Forest Plantations - Removals from Softwood
Plantations
610 &gt; MAIBsw</code></pre>
611 <pre><code>## [1] 10</code></pre>
612 @@ -1178,7 +1175,6 @@ Rem_{AR,2020} &= AD_{AR,2020,age} \times
AD_{AR,2020,area} \times MAIC_{AR}
613 &= -2967.6123297, -9639.9225192
614 \end{align}
615 \]</p>
616 -<p>MGG - NOTE check with carly</p>
617 <pre class="r"><code>&gt;
MonitoredValues$year2$AReforArea$age_yrs</code></pre>
618 <pre><code>## [1] 0.5 1.5</code></pre>
619 <pre class="r"><code>&gt; MAIVar</code></pre>
620 @@ -1215,8 +1211,8 @@ ER_{Enh,2020} &= 5.9030799\times 10^5 +
(-1.2607535\times 10^4) \\\
621 <p><span class="math display">\[
622 \begin{align}
623 ER_{2020} &= ER_{Defor,2020} + ER_{FDeg,2020} + ER_{Enh,2020} \\\
624 - &= 6.6331104\times 10^4 + 1.1681864\times 10^5 +
5.7770045\times 10^5 \\\
625 - &= 7.608502\times 10^5
626 + &= 6.6331104\times 10^4 + 1.1769822\times 10^5 +
5.7770045\times 10^5 \\\
627 + &= 7.6172978\times 10^5
628 \end{align}
629 \]</p>
630 <pre class="r"><code>&gt; ER_2020 <- ER_DEF_2020 + ER_FDEG_2020 +
ER_Enh_2020
631 diff --git a/reports/Fiji_ER_MonitoringReportExtraTables.html
b/reports/Fiji_ER_MonitoringReportExtraTables.html
632 index 99e4e9a..f0ae1ba 100644
633 --- a/reports/Fiji_ER_MonitoringReportExtraTables.html
634 +++ b/reports/Fiji_ER_MonitoringReportExtraTables.html
635 @@ -566,7 +566,7 @@ pre code {
636
637
638 <h1 class="title toc-ignore">Monitoring Report Extra Tables</h1>
639 -<h4 class="date">15 December, 2023</h4>
640 +<h4 class="date">06 February, 2024</h4>
641
642 </div>
643
644 diff --git a/reports/Fiji_ER_Report.html b/reports/Fiji_ER_Report.html

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```
645 index 28269ff..1c33d00 100644
646 --- a/reports/Fiji_ER_Report.html
647 +++ b/reports/Fiji_ER_Report.html
648 @@ -566,7 +566,7 @@ pre code {
649
650
651     <h1 class="title toc-ignore">Fiji ER Report</h1>
652     -<h4 class="date">15 December, 2023</h4>
653     +<h4 class="date">06 February, 2024</h4>
654
655     </div>
656
657
```