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1 Index: R/CalcFRLSoftwoodPlantations.R
2 =====
3 --- R/CalcFRLSoftwoodPlantations.R (revision 2150)
4 +++ R/CalcFRLSoftwoodPlantations.R (revision 2292)
5 @@ -53,20 +53,32 @@
6     uci_ec_sw_aae <- quantile(respcem * FRLParams$etacc, probs =
7     FRLParams$quci) # Upper CI limit
8     v_ec_sw_aae <- respcem * FRLParams$etacc # MC estimates
9 - ## TODO: FIX - change model area stocked to use survey data in table
10 - MGG
11 - # Area stocked end of 2006 in FPL's lease area
12 + # 3 Sep 2021 - Data provided by Carly Green from Fiji Pine
13 + netStockedArea <- data.frame(
14 +   year = c(2006:2016),
15 +   area = c(
16 +     33071,
17 +     33872,
18 +     33509,
19 +     32336,
20 +     32322,
21 +     31334,
22 +     30897,
23 +     30601,
24 +     31117,
25 +     29527,
26 +     23960
27 +   ))
28 + netStockedArea$c_t <- FRLParams$maicp * netStockedArea$area
29 + print(mean(netStockedArea$c_t))
30 +
31 +
32   A2006 <- 49503
33 -
34 - # Estimate of the areas harvested [ha] (data provided by FPL could not
35 - # for 2012 the area harvested was zero, the reported volume extracted
36   sw$area_harvested_ha <- sw$carbon_extracted_t / (FRLParams$maicp *
37   FRLParams$cuttingc)
38 -
39 - # Areas planted
40 - sw$area_planted_ha <- sw_hvol_parea[, 3]
41 -
42 - # Area stocked in 2005
43 + sw$area_planted_ha <- sw_hvol_parea[, 3]
44   A2005 <- A2006 + sw$area_harvested_ha[1] - sw$area_planted_ha[1]
45 -
46   # Area that was neither planted nor harvested during the Reference
47   # growth...
48   atp <- A2005 - sum(sw$area_harvested_ha)
49 @@ -85,9 +97,11 @@

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50     # Uncertainty analysis (removals in Softwood Plantations)
51     resmcrp <- vector() # Vector that collects the results
52
53 +   resmcrpNew <- vector() # Vector that collects the results
54     # Run simulation
55     .....
56     for (i in 1:FRLParams$runs) { # i <- 1
57         swi <- sw # Create a copy of 'sw'
58 +       netStockedAreai <- netStockedArea
59         # Random realization of MAI AGB (25% error)
60         maicpi <- rtriangle(1,
61             theta = FRLParams$maicp,
62             @@ -111,6 +125,11 @@
63             swi$cppt <- swi$area_planted_ha * FRLParams$deltaT * maicpi
64             # Total average annual C accumulation
65             resmcrp[i] <- mean(swi$cppt) + ctpi + cthpi
66 +       +
67         # Error in area is not included
68 +       netStockedAreai$c_t <- maicpi * netStockedArea$area
69 +       resmcrpNew[i] <- mean(netStockedAreai$c_t)
70     }
71
72     # Average annual removals from Softwood Plantations
73     .....
74     @@ -118,7 +137,27 @@
75     lci_ec_sw_aar <- quantile(resmcrp * FRLParams$etacc, probs =
76     FRLParams$qlci) # Lower CI limit
77     uci_ec_sw_aar <- quantile(resmcrp * FRLParams$etacc, probs =
78     FRLParams$quci) # Upper CI limit
79     v_ec_sw_aar <- resmcrp * FRLParams$etacc # MC estimate
80 +   +
81 +   ec_sw_aarNew <- mean(netStockedArea$c_t) * FRLParams$etacc # Estimate
82 +   lci_ec_sw_aarNew <- quantile(resmcrpNew * FRLParams$etacc, probs =
83     FRLParams$qlci) # Lower CI limit
84 +   uci_ec_sw_aarNew <- quantile(resmcrpNew * FRLParams$etacc, probs =
85     FRLParams$quci) # Upper CI limit
86 +   v_ec_sw_aarNew <- resmcrpNew * FRLParams$etacc # MC estimate
87
88 +   print(c(
89 +       ec_sw_aar,
90 +       lci_ec_sw_aar,
91 +       uci_ec_sw_aar,
92 +       length(v_ec_sw_aar)
93 +   ))
94
95 +   print(c(
96 +       ec_sw_aarNew,
97 +       lci_ec_sw_aarNew,
98 +       uci_ec_sw_aarNew,
99 +       length(v_ec_sw_aarNew)
100 +   ))
101
102     # Net emissions Softwood Plantations

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99     lciv_ec_sw_aane <- quantile(v_ec_sw_aae - # Emissions Softwood
100                                v_ec_sw_aar, # Removals Softwood
101    Index: DESCRIPTION
102    =====
103    --- DESCRIPTION (revision 2150)
104    +++ DESCRIPTION (revision 2292)
105    @@ -1,6 +1,6 @@
106     Package: FijiNFMSCalculations
107     Title: Fiji NFMS Calculations
108     -Version: 0.0.0.9000
109     +Version: 0.0.0.9001
110     Authors@R:
111         person(given = "Michael",
112               family = "Green",
113

```