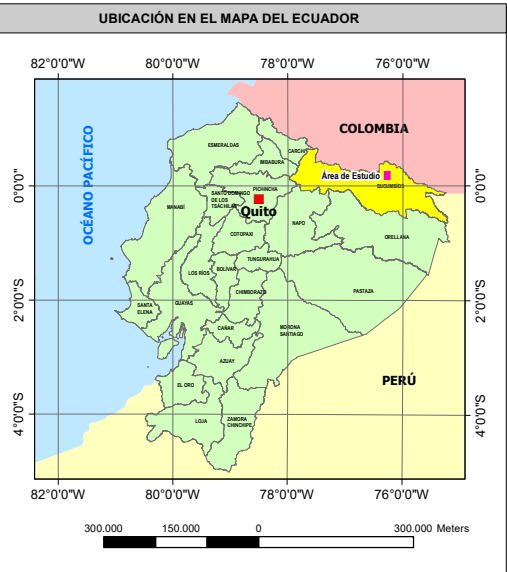


This topographic map illustrates the Singshué watershed, a sub-basin of the Río Siphue. The map is overlaid with a grid showing coordinates (Easting: 356000 to 360000; Northing: 10016000 to 10024000). Key features include:

- Land Use and Cover:** The watershed is divided into several colored zones: green (Vf / (1-2)), brown (C1 / (1-3)), and blue (C2 / (3-4)).
- Infrastructure:** A road network is shown, including a main road (orange line) and a secondary road (dashed green line). A pink line indicates a boundary or specific route.
- Settlements and Landmarks:**
  - ESPIRITU NOTENO:** Located near the top center, marked with a red dot.
  - PRECOOPERATIVA SIMÓN BOLÍVAR:** Located on the right side, marked with a red dot.
  - SANSAHUARI:** Located at the bottom right, marked with a red dot.
  - Singue Norte:** A small pink rectangular area in the upper left.
  - Singue C:** A small blue rectangular area in the lower center.
  - Singue B:** A small grey rectangular area in the lower center.
  - Singue 1:** A small grey rectangular area in the lower left.
- Topography:** Contour lines are drawn at 10m intervals, with labels such as 229, 231, 232, 233, 234, 235, 253, 254, 255, 256, 257, 258, 259, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 9

| Representación Cartográfica |               |                        |
|-----------------------------|---------------|------------------------|
| C1 Paisaje                  |               |                        |
| (1-3) Clase de Pendiente    |               |                        |
| Clase                       | Pendiente (%) |                        |
| 1                           | 0 - 5         | Suave                  |
| 2                           | 5 - 15        | Moderada               |
| 3                           | 15 - 25       | Poco abrupta           |
| 4                           | 25 - 45       | Abrupta                |
| 5                           | 45 - 70       | Muy abrupta            |
| 6                           | >70           | Extremadamente abrupta |



**ESCALA GRÁFICA**

1:25 000

500                      0                      500

 Metros

Proyección UTM. Elipsoide WGS84  
Datum Horizontal: Sistema Geodésico Mundial WGS84.  
Datum Vertical: Nivel medio del mar local, La Libertad Provincia de Santa Elena.  
Zona 18S

|                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ESTUDIO COMPLEMENTARIO A LA ACTUALIZACIÓN DEL PLAN DE MANEJO AMBIENTAL PARA UNIFICACIÓN DE LICENCIAS AMBIENTALES DEL BLOQUE ES-SINGUE PARA LA FASE DE EXPLOTACIÓN PARA LA CONSTRUCCIÓN DE LA PLATAFORMA SINGUE NORTE, ASÍ COMO LA VÍA DE ACÉSO Y LÍNEA DE FLUJO NOROCCIDENTAL A SINGUE B</b> |                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>DIRECTOR DEL PROYECTO:</b>                                                                                                                                                                                                                                                                   | <b>CONTIENE:</b>                                                                                                                                                                                                                                                                                                                                                                  |
| Ing. Miguel Alemán                                                                                                                                                                                                                                                                              | MAPA GEOMORFOLÓGICO                                                                                                                                                                                                                                                                                                                                                               |
| <b>ESCALA:</b>                                                                                                                                                                                                                                                                                  | <b>ARCHIVO DIGITAL:</b>                                                                                                                                                                                                                                                                                                                                                           |
| 1:25,000<br>enero, 2025                                                                                                                                                                                                                                                                         | C:\EIA\COMPLEMENTARIO_SINGUE\PROYECTO                                                                                                                                                                                                                                                                                                                                             |
| <b>REGISTRO IG M<sup>N</sup>:</b>                                                                                                                                                                                                                                                               | <b>FUENTE:</b>                                                                                                                                                                                                                                                                                                                                                                    |
| 1152                                                                                                                                                                                                                                                                                            | IG, Cartografía base oficial a nivel nacional, escala 1:50,000, 2011-2017.<br>Ministerio de Energía y Minas, Bosque protecto, 2020, Adaptado de UNIDAD MACAP-IPRAT. SISTEMAS, Geomorfología Cantones Pulacayo y Lago Azules, 2015.<br>Genteo ISI, Estudios hidroclimáticos, hidrogeológicos y de sedimentación, 2015, Genteo ISI. Diseño de facilidades del proyecto, enero 2024. |
| <b>PROYECTO:</b>                                                                                                                                                                                                                                                                                | <b>DEPARTAMENTO GIS</b>                                                                                                                                                                                                                                                                                                                                                           |
| 10428218                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                   |