



WS 2. Urban Planning of Open Spaces

www.amb.cat/pdu/xarxaexperts

Executive Summary 14.04.30

This document aims to be an executive summary of the virtual session and a continuation of the participative process begun on the 27th of March 2014 in the classrooms of the music school of Santa Coloma de Gramenet.

This virtual debate, the first of 6, lasted 4 weeks, and 50 professionals participated in it. We can assess this debate as extremely dynamic and rich not only because of the number of contributions but also because of their quality, since among the participants there were 3 of the 4 rapporteurs who were also quite active, and we were able to include the observations of 2 of the 4 members on the expert panel in the Workshop on Open Spaces. We also enlisted the opinions of the different experts around the region and at home, too, leading to a total of 89 messages. The participants were architects, environmentalists, biologists, lawyers and a few sociologists and engineers.

The debate, divided among the 4 reflection committees proposed in the workshop, put forth 58 questions, some of which still remain open, while others sprang up repeatedly among the different groups and were answered. Of these 58 questions, 11 were the most closely examined and might be an OPPORTUNITY for the new PDU because of their relevancy. We have presented these opportunities, which are listed below, along with the (literal) contributions of the participants, which are written in *italics*.

We have also listed the cities mentioned during the debate, the attached documents and the web links that appeared.

At the end of the documentation, we have attached the complete content of all four reflection committees, where we have highlighted the questions asked in yellow and the answers that have helped us to interpret the opportunities facing the BMA in green, at this moment as the pre-project of the PDUM is being drafted.

Enjoy the read,

PDU_metropolitan Team

11 Opportunities in the debate on Open Spaces

Opportunity 1.- We have to recover /rebuild the spaces on the periphery.

1.-/... *The urban outskirts are zones that accumulate many of the environmental and urban planning problems in the BMA because of their very lack of definition. Particularly focusing on them and finding new ways to address the problem is crucial in order to make their preservation, public use and the generation of more than just free-time activities compatible./...*

2.-/... *Without a doubt, the outskirts and all the outlying areas bordering on urban land are where the most efforts should be made..../...*

3.-/... *through social integration policies in the outlying neighbourhoods..../...*

Opportunity 2.- We have to overcome the negative connotations of the **category of unbuildable land**, as well as establish a new legal way of planning.

1.- *We have to view the system of open spaces as a set of elements that interact with each other, which may be dependent on each other or not, and which form part of a whole. So this would include lands that are both publicly and privately owned. Within this system of open spaces, we could define many different typologies depending on their assets, be they natural (habitats of interest, wetlands, etc.), or cultural or historical, as well as agricultural, vineyards, forests, habitat connectors, hydrographic, landscape, etc. It would be difficult to make a complete list, and they could be grouped together as in the Partial Territorial Metropolitan Plan of Barcelona (PTPMB).*

2.-/... *On the other hand, the PDUM should cover the fact that these spaces could also be multifunctional and compatible with others, since different lands fall into different typologies and may be suitable for a variety of uses at the same time. Their functionality, ecosystemic services, nature and location should be the key factors in their potentialities and preservation.*

Opportunity 3.- A new classification of **USES** of unbuildable land is needed, and this might influence the new urban planning code of Catalonia.

1.- *We cannot ignore that the concept of unbuildable land is contained in article 32 of the reworded Law on Urban Planning (TRLU) and that its system is regulated in article 47 of the TRLU. We have to guarantee the legal security of the plans proposed in this new PDUM. We know that a new urban plan of Catalonia is being “ruminated/cooked up”, or at least a new regulation is. This is probably the best time to reformulate a new legal approach on how these spaces should be defined and to determine what role they could play in the region depending on their nature, environmental services, potentialities and functionalities using a cross-cutting, multi-faceted vision.*

2.- *The PDUM could act as the spearhead of this new way of understanding, planning and managing open spaces. In fact, Article 32 of the TRLU is generic enough (“to ensure the rational use of the land and quality of life”) to develop the entire philosophy and organisation of the PDUM which can be gleaned from the plan of ecosystemic services and green infrastructure without causing any contradictions which would prompt legal insecurity.*

3.- *The idea of woodlands should be replaced by biodiverse areas, since biodiversity is the property that best defines their value. And this leads us to interpret their role beyond the productive image of the organic asset that they also harbour.*

4.- *Urban planning must accept that open spaces are crucially important in the functioning of the urban spaces within the BMA. As a result, given their complexity, they should not be limited by a handful of categories that pigeonhole them, whereas the city is defined by dozens of categories.*

5.- *Classification of activities in open spaces into: Sports, most of which are performed at stationary or sports facilities, although within the parks there are also areas that can be regarded as leisure-sports areas, especially races, walking, bicycling and others that require open spaces. One particular case is hunting, which should be treated uniquely and in coordination with the area in charge of the sectoral regulation (agriculture), health circuits (sports for non-athletes), adventure sports (ziplines, etc.), places for practising motor, cultural and educational sports, thematic parts like botanical gardens, zoos, etc., which today are classified as urban open spaces, a range of cultural activities such as the ones that appear in the BMA activity schedule (see website). Education, in coordination with schools and other entities, art parks, foundations, research and interpretation centres (always in return for collaboration in regional management, most likely in administrative concessions or, depending on the urban planning law, rehabilitation of the pre-existing architectural heritage).*

6.- *Primary sector areas: Forestry and other woodland products, productive forests, permaculture, agriculture, intensive and extensive, hobby and social gardens, livestock*

farms which forge synergies with the area around them (meadows for harvesting, beekeeping, etc.), maintenance of firewalls. Secondary sector areas, logistics areas with regulated outdoor materials: (if they have to exist, deal with them using imagination), mining activities in delimited areas while ensuring the link to restoration.

7.- I would not make hobby and social gardens a primary sector activity... they would fit better in the leisure or free-time sector, or in the tertiary sector since they are allotments. On the other hand, this is an activity which in some cases – just like others described – it also compatible with other kinds of spaces. Then again, we should consider the possibility of livestock farms that are not forced to forge direct synergies with the area (such as poultry farming). Perhaps we do not need to get too detailed, but given the impact and issues that could come with adding them, horse riding barns (social use, tertiary?) and more generally zoos (horses, “family” poultry farming, dog centres, etc.).

8.- Tertiary sector areas Hotels and hostelry in different modalities as long as they are specific to the site and on the right scale (always in exchange for cooperation in managing the land, most likely in administrative concessions or, depending on the urban planning law, rehabilitation of the pre-existing architectural heritage).

9.- Free-time in general on an individual and family level, with an educational purpose whenever possible, focusing on the heritage, history or environment. “Ecological machines”: Sustainable energy production centres (which monitor their impact on the landscape), phyto-purification and water filtration areas, reservoirs (as long as they are adapted to the site).

10.- Periurban uses: technical services, infrastructures and an entire range of community uses and services that are incompatible with urban uses. Uses that are incompatible with urban uses is a literal quote from the Law on Urban Development where it regulates unbuildable land (art 47 and following). Among other things, it refers to dumpsites, for example. The ambiguity noted is an important issue, technically speaking, since this definition leaves a door open to unbuildable land for whoever wants to and can force it. A well-written regulation should be able to avoid this by more specifically defining these uses.

Opportunity 4.- The PDU should be able to detect the **projects with supramunicipal value** and put them on the agenda; it should **identify/protect the systems** that are in **danger** and establish consortia to manage them.

1.- The fragmentation of open spaces is an issue of the ecological scale on which things happen, but it is not a problem in itself. The barrier effect lowers the likelihood of species’ and their populations moving, and this could be a problem.

2.- *Agricultural land also helps to preserve biodiversity and, in the case of an Agricultural Park, the fact that productive land is near the wetlands of the Llobregat River delta means that it ends up becoming a strategic site for numerous bird species.*

3.- *In 1960 there were 35,000 hectares of agricultural lands in the BMA; by 2010 there were 5,000 hectares. In 1960 the population of the BMA had 180 m² of agricultural land per inhabitant; by 2010 this had dropped to 18 m².*

4.- *Beyond whether they are protected or not by the different sectoral laws or plans: PTRMB, Plan of Spaces of Natural Interest (PEIN), Xarxa Natura 2000, Protected Bird Zone (ZEPA), coastal area, Hydraulic law, Law on Land... etc., we have to reflect on them and understand what role they should play and what role they do play in the region.*

5.- *There are places in the metropolitan area which are very important and must be rethought and defined: The Parc de Collserola, its boundaries, the Llobregat River Agricultural Park, the Llobregat River delta, the Besòs River,... and we have to do so with a new vision, new concepts and knowledge of current and future needs..*

6.- *Regarding the way we articulate the management of these particular spaces, administratively speaking we chose to use consortia years ago, and now we have to assess whether this was a good decision.*

Opportunity 5.- The PDU could establish a **set of tools to measure environmental value.**

1.- *There are aspects like hyper-frequenting, a large number of users who are increasingly seeking more diverse activities in open spaces; this is certainly an aspect in which urban planning has less input but where management, awareness-raising or generating alternatives might have a more direct influence.*

2.- *.../...Not so much to have a mercantilist vision of the open spaces but to be able to assess or monetarily value how the open metropolitan spaces provide us with these services.*

3.- *.../...We should gather the testimony that the General Metropolitan Plan (PGM) provides us after protecting open spaces for 40 years based on the concept of “non-urban”, and we have to give it a new twist with a scientific basis and the territorial challenges we are facing today. We agree that we have to preserve and essentially foster the purpose of the spaces (which is clearly based on their structure and uses) and the ecosystemic services that they provide through strict planning of preservation, yet a*

kind of planning that is flexible enough to take advantage of the opportunities that allow for active management with the presence of both the public and private sectors.

Opportunity 6.- The PDU should be able to **include the TIME factor** in its provisions in relation with, among other things, **Climate Change** on the one hand and **Social Changes on the other**.

1.- Understanding that not all holm oak and pine groves, scrublands, agricultural areas, etc., within the BMA are ecologically equal is crucial in order to decide on what role or roles they can play within the system of open spaces. Knowing their condition and role and predicting their possible evolution will help us to take better decisions.

2.- We have to look towards the future and inform the PDM with the experience and new knowledge from recent years, as well as with sociological, environmental, technological, economic, industrial and infrastructure trends. What we cannot ignore is that society changes, and so do its needs, so we have to be capable of developing a sound metropolitan urban planning framework which provides a balanced, sustainable, cohesive, competitive and well-connected land for tomorrow's society.

3.-surely if we speak strictly about the PDU, the elements or topics that play the most important role...the important infrastructures and issues for the future quality of life and functioning of the BMA linked to energy issues (a true Achilles heel) and environmental issues (water and especially mitigation or adaptation to climate change.

Opportunity 7.- We must have a **clear discourse on the sea** and the 45 km of coast in the BMA.

1.- ...the sea is one of the aspects that links up the most with our "strategic" approach as the capital of the Mediterranean. And all of this has a direct dimension with the issues we have examined: fishing, connections, the tourism port, etc.

2.- There is a large area of open spaces that have not been well interpreted ecologically, or have only been interpreted in terms of productive aspects or preservation. Not all open spaces are equal or have the same value in terms of ecosystemic services. And yet, we have not analysed their ecosystemic properties. This hinders us from taking better decisions on the role and future we want for them.

3.- The sea is one of the most important open spaces we have, and I think that it should be considered in the PDU in order to see the role played by the different stretches of metropolitan coastline and how they interact with the city behind them, and how we should improve their quality not only in terms of bathing but also their ecological quality. Many efforts have been made, and even more are needed.

Opportunity 8.- Regarding **metropolitan resilience**, the PDU should be capable of establishing a priority/strategy on the **food production in the region**.

1.- *The analyses by the FAO and UN-Habitat stress the rising importance of the food chain in cities, which is predicted to suffer from tensions during the forthcoming decades because of the effects of climate change and the demographic surge..../...*

2.- *..../... the concept of the short chain (direct sales without intermediaries) between agricultural production and consumption fostered by proximity to the production site is a phenomenon which is attracting more interest among the public, and at a time of overall rethinking, it is taking shape as a possible economic alternative./...*

3.- *..../... in the Barcelona metropolitan area, there are many initiatives on this issue that have been launched, including joint action encompassing planning, management and economic reconversion/diversification to recover the rural space of Gallecs.*

Opportunity 9.- The PDU should establish a **strategic definition** of the DELTA as a **Productive Economic Area**.

1.- *I think that the existence of a delta, with quite high quality soil, available water and a climate that makes 3 harvests per year possible, and one that is thus agriculturally competitive and strategically located (and somehow unique in its environs), deserves the same consideration as a productive metropolitan economic area as other spaces used for other economic activities.*

2.- *It is true that the metropolitan agricultural area cannot be considered an economic area. This topic, which is extremely important with regard to the PDUM, might (finally!) design metropolitan strategies on the space-function relationship between metropolitan agricultural production (which is urban in nature) and the city's other activities/functions.*

3.- *Such an edaphologically productive land, with our climate and the proximity or large transport infrastructures and the city, should be regarded as a top-tier agricultural centre.*

Opportunity 10.- The PDU should be able to **bring concepts like efficacy and complementariness** into the implementation and development of projects with the working teams: **Interdisciplinarity**, horizontal working teams...

1.- *Environmental professionals with decision-making capacity should currently be participating in the strategies, plans, programmes and projects. For this reason, they should be considered peers with other actors, and these professionals should improve professionally in order to become more technically consistent, to liaise better with others and to gain the ability to take major decisions.*

2.- *Environmental evaluations surely require an in-depth revision of their format. They should concentrate on what is important and achievable via a plan and do so concisely and clearly by setting clear environmental objectives and taking decisions on the best options, not the ones that are ideally better.*

3.- *And they should contain a mechanism to parameterise the decisions and conduct ongoing self-evaluations of the validity of the study. The fact that the plan may not be developed for another 10 years does not mean that the situation does not evolve and that environmental models or studies may not fall into crisis...*

Opportunity 11.- The PDU should **foster** or regulate **education and participation strategies**.

1.- *“Softening” the lines that foster/forbid uses in given spaces is only possible when we have these lines “in our heads”, that is, internalised through socialisation processes.*

2.- *According to the principles of landscape ecology (RTT Forman), the territory is complex, with major intersections among corridors, splotches and the matrix. .../... Therefore, at these points it is extremely important to take citizens’ needs into account in order to properly manage these spaces.*

3.- *It is very important for the planning to be not wholly deterministic while seeking a balance between conservation and use. It is crucial to manage these spaces with this in mind. How public space is dealt with and the problems of coexistence and conservation should be dealt with using aggressive education and mediation.*

58 Questions on the debate on Open Spaces

1. If we understand that open spaces give us an opportunity to organise or structure the territory of the BMA from a global perspective (they are both urban and non-urban), what are the structuring factors?
2. Lines, flows?
3. Sectors, areas?
4. Is it a centralising, hierarchical structure or a polycentric, dispersed structure?
5. How is this land articulated?
6. Must we make it possible for different uses and activities in these open/free/ecosystemic/connecting/ecological spaces to be performed in the same property/plot?
7. How should we (re)build the spaces on the outskirts of the city? What strategies do you think are the best to turn the problem into an opportunity?
8. Following the approach of a sufficiently flexible global strategy on a metropolitan scale, could we gather local bottom-up initiatives?
9. But what regulation makes this possible?
10. How can we overcome the buildable/unbuildable land divide? What factors lead us to draw “lines” when regulating this?
11. If we go beyond categorisation by degrees of protection, what are the characteristics or functions of these spaces to classify in a way that optimises their management?
12. Can the biophysical matrix structure the region?
13. Can the planning go beyond the buildable/unbuildable land divide and view the region as a whole?
14. Does the PDU have to include the value and meaning of all the micro-realities (present in the empty spaces) with the idea of GRADIENT as introduced by Xavier Mayor in his talk?
15. The issue discussed in the debate on “renaturalising” the city, that is, introducing nature into the city, and the possibility also mentioned to creating of urban green on roofs
16. Could the PDU establish/define working forms/structures among the different experts with a more interdisciplinary vision while also including the efficacy parameter?
17. How can we even assess the economic value of the ecosystemic services of the open spaces without having a deeper understanding (though not quite on the level of details) of the status of the different habitats comprising it?
18. Long-term planning means that we have to consider the time factor. How can we include this in the planning of the metropolitan area?
19. What will the effects of climate change be on the open spaces, the processes, the ecological flows, the water cycle, the metropolitan coastline?

20. How can we incorporate aspects like climate change and resilience into the PDU?
21. How can we guarantee the activities that take place in the metropolitan open spaces?
22. How can we guarantee the agriculture in the Agricultural Park or in Collserola, or in Mas Rampinyo?
23. Can we take advantage of other resources like the biomass produced by the metropolitan woodlands?
24. What can be planned from the urban planning perspective?
25. In the contribution of quality of life on the costs of this not existing. What would it cost to lose these spaces?
26. How would quality of life decline?
27. What value do they really contribute to rectifying inequalities in the metropolitan area?
28. In this sense, shouldn't we consider the food system as a more strategic factor in the metropolitan metabolism?
29. Doesn't agro-food production imply more things for urban resilience than a strategy to make the preservation of open spaces economically sustainable?
30. Would this perception of the food system as a basic system of metropolitan functionality change the classification of agricultural spaces within the regional planning?
31. How many metropolitan areas have productive land measuring around 2,000 hectares that are potentially productive in their immediate environs?
32. What free-time/leisure activities could you mention that converge in the open metropolitan spaces?
33. And which of these activities require regulation, management and especially planning mechanisms in order to make the preservation of productive activities in open spaces compatible?
34. Could you provide examples of uses that are not compatible with urban uses which are being externalised to the open spaces?
35. Could some of these uses be on urban industrial land?
36. Or in facilities?
37. Would they be periurban uses? This is an economic issue of land prices?
38. Or pre-existing conditions?
39. "Do we have to change the classification of land as unbuildable?"
40. Do we have to use other more positive terminology that is more specific to the land's functionality, values (environmental/strategic) and potentialities?"
41. What name should unbuildable land be given so that it doesn't carry this negative connotation and instead embodies the values and interest that it has?
42. Names such as those in the territorial plans, System of Open Spaces?
43. System of Free Spaces?

44. Should we go even further and call them System of Life-Support Spaces?
45. The new terminology should also extend to the categories. Would you maintain a categorisation according to the type of space (woodland, agriculture, river, etc.)?
46. Or should we opt for more functional concepts, such as regulation of the water cycle, climate regulation, food production, soil protection, leisure interest, etc.?
47. The underlying issue is what kind of region we want for ourselves and for future generations.
48. How can planning guarantee the preservation of biodiversity, or, in fact, how are certain ecological processes guaranteed?
49. What can urban planning contribute to this?
50. What ecological values do we guarantee? What are the most important ecosystemic services in our land and what needs to be guaranteed?
51. Continuing with the conversation on the new definition of unbuildable land and its possible uses, which was shared by several working groups, don't you think that perhaps it should be defined by the Law on Urban Planning instead of the PDUM?
52. With regard to this new kind of urban planning which should encourage respect for open spaces (parks, beaches, rivers, gardens, squares, streets, nooks, etc.) and the peaceful coexistence between people and among uses (with some degree of uncertainty) that these spaces create, do you think that the bottom-up strategies being used in some cities and some groups make sense?
53. Can the PDU foster or regulate education or participation strategies?
54. Where are the most important efforts? Unquestionably the greatest effort should be made on the outskirts and the borderlands with the urban space.
55. How can we even assess the economic value of the ecosystemic services of the open spaces without having a deeper understanding (though not quite on the level of details) of the status of the different habitats comprising it?
56. Conflicts between productive activities in the Open Spaces and leisure and free-time?
57. What do the farmers in the Agricultural Park think about this?
58. Timberland in a metropolitan area where it seems that we are further and further from nature?

7 Attached documents

1. *La urbanidad en los espacios naturales*. Thesis by Ana Neta dos Santos. December 2012. Anàlisi de tres parcs metropolitans entre ells Collserola.
2. *Estudi sobre les façanes, cobertes i murs de la ciutat de Barcelona*. Agència d'Ecologia Urbana, Ajuntament de Barcelona. 2009.
3. *Vancouver Food Strategy*. City of Vancouver. January 2013
4. *El sistema alimentari de la AMB. Propostes per a l'anàlisi*. José Luis Haro-AMB. February 2014
5. *Estudi sobre la reducció del camp agrari de la Àrea Metropolitana de Barcelona*. DIBA
6. Introductory article by Manuel Solà, in the publication *Camp #19*
7. *Signal* Journal 1941.

5 Web links

- www.growinggreenguide.org
- www.yesweplay.com
- www.supurbfood.eu
- www.paisajetransversal.com
- www.zuloark.com

12 Cities mentioned

- Toronto
- London
- Amsterdam
- Vancouver
- Rotterdam
- Rome
- Ghent
- Vigo
- Bristol
- Zurich
- Riga
- Melbourne

50 Participants

[Aida Munsó](mailto:amunso@amb.cat)(amunso@amb.cat), [Albert de Pablo](mailto:adepablo@interlands.cat)(adepablo@interlands.cat), [Annalisa Giocoli](mailto:annalisa.giocoli@amb.cat)(giocoli@amb.cat), [Antoni Farrero](mailto:farrero@amb.cat)(farrero@amb.cat), [Begoña Bellette](mailto:begoña.bellette@consorci-besos.com)(b.bellette@consorci-besos.com), [Bet Marrugat](mailto:marrugat@amb.cat)(marrugat@amb.cat), [Carles Crosas](mailto:carles.crosas@upc.edu)(carles.crosas@upc.edu), [Cristian Gómez](mailto:gomezg@amb.cat)(gomezg@amb.cat), [Eduard Saurina](mailto:eduard.saurina@amb.cat)(saurina@amb.cat), [Enric Battle](mailto:enric.battle@battleiroig.com)(enric.battle@battleiroig.com), [Erick Valdez](mailto:erick.valdez@bcnregional.com)(erick.valdez@bcnregional.com), [Guillermo Basso](mailto:gbasso@xrassociats.com)(gbasso@xrassociats.com), [Helena Sanz](mailto:sanzhelen@gmail.com)(sanzhelen@gmail.com), [Ioanna](mailto:ioanna.spanou@bcnregional.com)
[Spanou](mailto:ioanna.spanou@bcnregional.com)(ioanna.spanou@bcnregional.com), [Joan Llord](mailto:jllortc@bcn.cat)(jllortc@bcn.cat), [Jordi Julià](mailto:jordi.julia@transfer.cat)(jordi.julia@transfer.cat), [Jose Alonso](mailto:jalonso@amb.cat)(jalonso@amb.cat), [Jose Luis Haro](mailto:joseluis.haro@amb.cat)(haro@amb.cat), [Josep Ma. Carreras](mailto:carreras@amb.cat)(carreras@amb.cat), [Karmele Rekondo Ferrero](mailto:rekondo@amb.cat)(rekondo@amb.cat), [Laia Soriano](mailto:lsoriano@amb.cat)(lsoriano@amb.cat), [Laura Martin](mailto:laura.martin@santcugat.cat)(lauramartin@santcugat.cat), [Luchy Miquel](mailto:lmiquel@amb.cat)(lmiquel@amb.cat), [Marc Montlleó](mailto:marc.montlleo@bcnregional.com)(marc.montlleo@bcnregional.com), [Marta Continente Gonzalo](mailto:marta.continente@amb.cat)(mcontinente@amb.cat), [Núria Pie](mailto:nuria.pie@bcnregional.com)(nuria.pie@bcnregional.com), [Noemí Martínez](mailto:nmgarcia@amb.cat)(nmgarcia@amb.cat), [Nuno](mailto:nuno.margalho@bcnregional.com)
[Margalho](mailto:nunomiguel.tavares@bcnregional.com)(nunomiguel.tavares@bcnregional.com), [Oscar Carracedo](mailto:oscar.carracedo@coac.net)(osa@coac.net), [Pablo Molina](mailto:pablo.molina@icab.cat)(pablo.molina@icab.cat), [Santiago Juan](mailto:sjuan@amb.cat)(sjuan@amb.cat), [Sito Alarcón](mailto:sito.alarcón@consorci-besos.com)(sito@consorci-besos.com), [PDU Metropolità](mailto:pdu@amb.cat)(pdu@amb.cat), [Txus Cruz](mailto:txus.cruz@amb.cat)(jcruz@amb.cat), [Victor Ténez](mailto:vtenez@amb.cat)(vtenez@amb.cat), [Xavier Alarcón](mailto:xavier.alarcón@amb.cat)(jacarbo@amb.cat), [Xavier Mayor](mailto:xavier@e-xmf.com)(xavier@e-xmf.com), [Xavier Segura](mailto:xavier.segura@amb.cat)(xsegura@amb.cat), [Anna Àvila](mailto:anna.avila@uab.es)(anna.avila@uab.es), [Fernando Domínguez](mailto:fernando.dominguez@elprat.cat)(dominguez@elprat.cat), [Gemma Conde](mailto:gemma.conde@bcnregional.com)(gemma.conde@bcnregional.com); [Hector Santcovsky](mailto:santcovsky@amb.cat)(santcovsky@amb.cat), [Josep M. Carrera Alpuente](mailto:josep.m.carrera.alpuente@gmail.com)(jmc.alpuente@gmail.com), [Juli Esteban](mailto:juliesteban.n@gmail.com)(juliesteban.n@gmail.com), [Martín Gullón](mailto:martín.gullón@amb.cat)(gullon@amb.cat), [Pepe Lascurain](mailto:lascurain@sgm.es)(lascurain@sgm.es), [Raimon Roda](mailto:raimon.roda@diba.cat)(rodanr@diba.cat); [Rosa Escala](mailto:rescala@coac.cat)(rescala@coac.cat); [Albert Beltran](mailto:albert.beltran@diba.cat)(beltranma@diba.cat); [Carles Castell](mailto:castellpc@diba.cat)(castellpc@diba.cat), [Dolors Clavell](mailto:dolors.clavell@icab.cat)(dclavell@icab.cat); [Jacob Cirera](mailto:jacob.cirera@bcnregional.com)(jacob.cirera@bcnregional.com), [Juan Carlos Montiel](mailto:juan.carlos.montiel@bcnregional.cat)(jcmontiel@bcnregional.cat), [Rafael Argelich](mailto:rargelich@badalona.cat)(rargelich@badalona.cat), [Xavier Estivill](mailto:xavier.estivill@momentum.cat)(momentum@momentum.cat); [Carles Llop i Torné](mailto:cllop@coac.net)(cllop@coac.net); [Carmen Gomez](mailto:carmen.gomez@consorci-besos.com)(c.gomez@consorci-besos.com), [Marc San José](mailto:msanjose@amb.cat)(msanjose@amb.cat), [Marta Bunyesch Martimpé](mailto:marta.bunyesch@montcada.org)(mbunyesch@montcada.org); [Robert Juvé](mailto:rjm@molinsderei.cat)(rjm@molinsderei.cat),